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ABSTRACT

This volume of the journal for the California Association of School Psychologists provides current information on a broad array of topics related to the work of school psychologists. The articles contribute important information on contemporary issues in the field, such as using a strength-based perspective when assessing students, student support teams focusing on empirically supported interventions and data-based decision making, and a study examining the efficacy of a cognitive behavioral counseling group for elementary students with behavioral problems. Articles in this issue include: (1) "The California School Psychologist as a Catalyst for Change" (Shane R. Jimerson; Marilyn Wilson); (2) "Integrating Strength-Based Perspectives in Psychoeducational Evaluations" (Sabrina Rhee; Michael J. Furlong; Joseph A. Turner; Itamar Harari); (3) "Problem Solving Student Support Teams" (Kristin M. Powers); (4) "An Introduction to Cultural Issues Relevant to Assessment with Native American Youth" (Jill D. Saxton); (5) "Effectiveness of a Cognitive Behavioral Group Intervention for Elementary Aged Students" (A. Terry Richardson); (6) "A Synthesis of Grade Retention Research: Looking Backward and Moving Forward" (Shane R. Jimerson); and (7) "Primary Prevention of School-Based Violence: A Developmental Risk and Resilience Model for School Psychologists" (Rebecca Bell). (Contains 302 references.) (JDM)

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2001
Volume 6

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2001 Volume 6

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CALIFORNIA ASSOCIATION OF SCHOOL PSYCHOLOGISTS

The California School Psychologist

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Joseph A. Turner
Itamar Haran

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Rebecca Bell

Primary Prevention of School-Based Violence A Risk and Resilience Model for School Psychologists

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The California School Psychologist

2001, Volume 6

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The California School Psychologist as a Catalyst for Change

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As a repository and resource, this volume of *The California School Psychologist* provides a wealth of information on a broad array of topics related to the work of school psychologists. Considering the multifaceted and comprehensive training standards for school psychologists, it is important to recognize the scope of knowledge maintained to serve the children and families throughout the state. Domains of knowledge include; development, psychology, education, diversity, assessment, intervention, consultation, program planning, wellness promotion, crisis intervention, counseling, legal, ethical, research, and evaluation. This breadth of knowledge establishes a foundation for many school psychologists to provide leadership in facilitating the socioemotional and cognitive competence of children.

It is important to highlight that during the past year *The California School Psychologist* has been selected to be included on two international electronic literature bases; *ERIC*, developed by the US Department of Education and *PsycINFO*, developed by the American Psychological Association. Thus, students, scholars, and practitioners around the world may now access and use the manuscripts published in *The California School Psychologist*.

Articles in this volume contribute important information on contemporary issues in the field, including: the importance of a strength-based perspective when assessing students; the use of student support teams to focus on empirically supported interventions and data-based decision making; important considerations when working with Native American students; a study examining the efficacy of a cognitive behavioral counseling group for elementary students with behavioral problems; a synthesis of grade retention research and discussion of empirically supported interventions; and conceptualizing school-based violence from a risk and resiliency perspective and emphasizing primary prevention programs. The following highlights from each article offer an orientation to the topics addressed in this volume.

The first article conveys a rationale and vision for integrating strength-based perspectives in psychoeducational evaluations. The strength-based perspective is characterized by a holistic, contextual, and optimistic conceptualization that aims to enhance positive development in youth. Integrating this perspective within psychoeducational evaluation places an emphasis on assessing social, cognitive, and interpersonal strengths. The article includes a cogent discussion of thriving, resilience, positive coping, and protective factors that provides a conceptual foundation for organizing assessments of youth's personal and social resources. While few standardized measures addressing such resources exist, the authors provide a review of two useful strength-based instruments: the Behavioral Emotional Rating Scale (BERS) and the California Healthy Kids Survey (CHKS). The authors conclude with recommendations and encouragement for school psychologists to adopt a strength-based orientation as the foundation for assessment, consultation, collaboration, and intervention to enhance student success.

The second article provides a preliminary evaluation of an on-going effort to improve Student Support Teams (SST). The primary aim of the reported reform efforts has been a move away from student deficits and disabilities, towards a focus on empirically supported interventions and data-based decision making. The author discusses critical components of SSTs including: organization, management, teamwork, and problem-solving strategies. A self-study checklist that includes these components is also provided. The initial results indicate that the reform activities are associated with increased perceived efficacy of the SST among teachers and also influenced a decline in the number of African American students referred for special education services. The author also provides a discussion of limitations of the current categorical system used to provide services to students with disabilities. The central tenet of this article is that problem solving SSTs provide a means of meeting students needs in the least restrictive environment and that school psychologists have more time to do consultation, counseling, and other interventions.

The third article contributes an introduction to cultural issues relevant to assessment with Native American students. The author provides a description of schooling experiences of many Native American youth and examples of cultural factors that influence their educational experiences. Appropriate behaviors for establishing rapport and trust are outlined. The importance of identifying language barriers and acculturation levels is also emphasized. Considering the implications of comparative groups for the use of standardized assessments, the author provides a brief review of the validity of social-emotional and cognitive tests addressing the use of non-Native American standardization samples. The recent literature included in this article may provide a means of gathering additional information relevant for preparing to work with Native American students. The author concludes with a broadly defined process to facilitate culturally competent assessment. Considering the diversity across California, cultural awareness and sensitivity are especially important among educational professionals.

The fourth article examines the effectiveness of a weekly cognitive behavioral counseling group intervention for first- through fifth-grade students with behavior problems. The focus of the groups included: changing students' cognitions regarding school behavior, promoting desirable behaviors through reinforcement, and providing positive behavioral modeling and learning experiences. The group design was based on previous empirically-demonstrated programs of cognitive behavioral counseling. Each participating student received an individualized behavior plan and the classroom teacher provided weekly ratings addressing each of the target areas. The evaluation demonstrated significant improvement regardless of student grade level or type of problem identified. The author provides details of the group activities, methodology of the evaluation, an overview of the results, and concludes that the results of this study provide further evidence supporting the use of group counseling programs in the schools. This article is an excellent example of a scientist-practitioner model; implementing proven programs and completing a systematic formative and summative evaluation.

The fifth article provides a synthesis of the available research addressing the efficacy of grade retention. Following a brief overview of the contemporary political zeitgeist and trends in the prevalence of grade retention, the author presents results from seminal systematic reviews and meta-analyses of research from the past century. The synthesis includes research examining the effects of grade retention on academic achievement, socioemotional adjustment, and long-term outcomes associated with grade retention. Research results consistently fail to demonstrate the efficacy of grade retention. The author provides a transactional-ecological developmental framework to facilitate the interpretation of the research. This article encourages school psychologists to provide leadership and emphasize the research when advocating for appropriate prevention and

intervention programs. The article also includes a brief review of effective alternatives to grade retention. Considering the emphasis on educational standards and accountability and California legislation regarding promotion performance standards, the research summarized in this article is especially timely.

The final article offers a developmental risk and resilience model to be incorporated in the primary prevention of school-based violence. This article examines literature addressing school violence, emphasizing theoretical frameworks invoked in current prevention programs. The author suggests that key principles of developmental psychology and ecological systems theory would enhance prevention programs and recommends that school psychologists incorporate the current empirical base in their consultation efforts. In particular, the author presents a rationale for adopting a developmental risk and resilience framework. The article also includes recommendations for assessment, implementation, and evaluation related to prevention programs. Given their training and expertise, school psychologists are uniquely prepared to provide leadership in developing school-based violence prevention programs.

As emphasized throughout this volume of *The California School Psychologist* it is important to reflect on current practices, consider available research, envision the future, and advocate for children and families. It is through this process that school psychologists may provide the catalyst to enhance the educational policies and programs to facilitate the social and cognitive competence of all students. The articles in this volume advance our knowledge and recognize *The California School Psychologist* as a catalyst for change.

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Integrating Strength-Based Perspectives in Psychoeducational Evaluations

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Emerging from the risk and resilience literature is the recognition that a focus on psychopathology and deficit-based assessment has its limitations. Developing an understanding of a youth's developmental needs and the creation of a suitable intervention strategy also requires knowledge of her or his life contexts and personal assets. This holistic and optimistic perspective, which seeks to enhance positive development in youth, has been referred to as "strength-based" assessment. Until recently, children's social/interpersonal strengths have not been systematically examined and there have been few standardized measures specifically designed to assess strengths. This article discusses the importance of a strength-based perspective when assessing students. Principles will be emphasized by demonstrating the utility of two strength-based instruments: the *Behavioral Emotional Rating Scale* (BERS) and the *California Healthy Kids Survey* (CHKS) in school psychology research and practice.

You can t see the whole sky through a bamboo tube.
(Traditional Japanese saying)

Both in the professional literature and applied settings, school psychologists have called for an alternative to deficit-based perspectives of assessment, practice, and research. Recently, this discussion has centered around the need for a more flexible model with which to assess behavioral and emotional functioning in youth (Achenbach, 1998; Quay, 1986). The traditional medical model concerning problem assessment and remediation is limited in both the scope and nature of information it can provide. Indeed, school psychologists have long endorsed a strength-based perspective as a viable and practical paradigm to work from (e.g., Lambert, 1964), and a growing recognition to embrace this perspective is promoted among some school psychology practitioners and researchers (Doll & Lyon, 1998; Miller, Brehm, & Whitehouse, 1998; Nettles, Mucherah, & Jones, 2000; Robertson, Harding, & Morrison, 1998; Smokowski, Reynolds, & Bezruczko, 1999).

The task of identifying student strengths is a standard part of the school referral process. For example, the routine examination of strengths and weaknesses on psychoeducational evaluations and reporting this information is an important component of the Individualized Education Program (IEP) and school psychology practice. School psychologists have contributed ideas to an evolving body of research that deals with strength building in youth, and practitioners incorporate the strengths perspective in psychoeducational evaluation and planning to some extent: Nonetheless, there continues to be an unequivocal focus on deficits as shown by the fact that there are federal and state mandates to assess areas of disability and deficits, but no comparable mandates to assess student well-being and assets. Moreover, some studies have suggested that current assessment prac-

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tices of school psychologists are inconsistent with the tenets of strength-based or ecological models (Kelley, 1998).

Strength-based assessment is the measurement of emotional and behavioral skills, competencies, and characteristics that (a) create a sense of personal accomplishment; (b) contribute to satisfying relationships with family members, peers, and adults; (c) enhance one's ability to deal with stress and adversity; and (d) promote one's personal, social, and academic development (Epstein & Sharma, 1998). Increased attention to strength-based constructs has the potential to enhance psychoeducational assessments.

The purpose of this article is to (a) advocate for strength-based assessment though a review of the extant literature on positive youth development, thriving, resilience, and coping; (b) discuss two strength-based measures [*Behavioral Emotional Rating System* (BERS; Epstein & Sharma, 1998) and the *California Healthy Kids Survey* (CHKS; Constantine, Benard, & Diaz, 1999)], that hold relevance to psychologists' work; and (c) conclude with recommendations for school psychologists on how to incorporate a strength-based perspective in assessment, consultation, collaboration, intervention and program evaluation.

THE DIALOGUE ON STRENGTHS: NOT SIMPLY, "THE GLASS IS HALF FULL"

In their benchmark article, Wieck, Rapp, Sullivan, and Kisthardt (1989) coined the term "strengths perspective," a framework through which to view youth and families differently; that is, with greater concern for their strengths and competencies. The use of this approach is increasing in many disciplines and practices (Rapp, 1997). For example, a strength-based model of solution-building has been evident in the mental health field (e.g., constructive therapies; Hoyt, 1996), medical field (e.g., wellness vs. illness), community-level advocacy (e.g., asset-based storehouses vs. wastelands; Kretzman & McNight, 1993), and prevention and education research (e.g., resilience and hardiness; see reviews by Anthony, 1987; Butler, 1997; Cowan, Cowan, & Schultz, 1996; Gore & Eckenrode, 1994; Kaplan, 1999; Masten, Best, & Garmezy, 1990; Mrazek & Haggerty, 1994; Rutter, 1990).

A strength-based perspective tells a much richer story about what children and adolescents are doing to "make things happen" and "succeed despite the odds" rather than just "letting things happen" as passive bystanders in their own lives with emphasis on how they fall short. Larson (2000) calls attention to providing crucial opportunities for youth to learn and build *initiative*, as this characteristic is an essential element of positive development. Initiative, as defined by the capacity for agency or autonomous action (Deci, 1995), is at the root of positive developmental variables such as creativity, resourcefulness, altruism, and civic engagement (Larson, 2000). Furthermore, Larson contends that *initiative* is made up of three necessary elements: (a) intrinsic motivation; (b) concerted engagement in the environment or active thought and effort in dynamic exchanges with real world intricacies; and (c) temporal arc, where these engaging exchanges occur over time and might include setbacks, re-evaluations and strategy accommodations. The author also provides a cogent argument for the value of "structured youth self-directed activities" (e.g., sports, hobbies, arts) and its role in developing *the capacity for initiative* and other positive assets in youth (i.e., via intrinsic motivation, concentrated engagement, and temporal arc). Efforts to provide opportunities and enhance youth strengths and initiative can be fostered by school psychologists and serves as a backdrop for understanding factors related to positive youth development.

Thriving, Resilience, and Positive Coping

A growing body of literature has refocused attention on strengths as it pertains to positive youth development. In the following section, we consider the contributions of thriving, resilience, and coping to the strength-based approach.

Children's ability to thrive is distinguished by a more positive empowering view of human potential (Morrison et al., 2000). It has been asserted that when an individual is faced with stress and challenges, unless they succumb, they will survive, recover, or possibly even thrive. When one thrives, he or she not only bounces back in the face of adversity, but surpasses previous levels of functioning, grows vigorously and flourishes (O'Leary, 1998). The individual responds in a more sophisticated manner and functions at a higher level in order to (a) acquire new skills that were not present before the adverse event, (b) gain a new sense of mastery or confidence, (c) strengthen supportive social relationships, (d) strive for further success and perseverance rather than giving up, and (e) acquire an evolved philosophy of life with new directions and priorities (Calhoun & Tadeschi, 1998; Carver, 1998). Furthermore, Caplan (1964) points out that an individual's current mental health status can be viewed as the product of how prior life challenges have been addressed and overcome. The concept of thriving is important within the strength-based perspective because it reframes student problems as opportunities for adaptation and improvement. In this perspective, challenges are actually welcomed because they have the potential to provoke growth and development.

Studied primarily with children, resiliency refers to constructive rather than debilitating reactions to disadvantage (Luthar & Cushing, 1999). Resiliency emphasizes the natural, self-righting tendencies of individuals who, when given the opportunity and support, succeed against what are sometimes incredible odds. Furthermore, the relationship between adversity and measured significant outcomes is said to be moderated by protective factors (Gest, Neeman, Hubbard, Masten, & Tellegen, 1993). Although the bulk of resiliency research is recent, this term was first used in the 1950s to describe individuals who survived stressful environments and situations (for reviews see Anthony, 1987; Cowan, Cowan, & Schultz, 1996; Gore & Eckenrode, 1994; Kaplan, 1999; Masten, Best, & Garmezy, 1990; Mrazek & Haggerty, 1994; Rutter, 1990). Over the last decade, various models of resiliency have been proposed (e.g., attachment perspective; Egeland, Carlson, & Stroufe, 1993), each emphasizing various ecological and psychological contexts. Garmezy and his colleagues (Garmezy, 1993; Masten et al., 1990) defined resiliency as a "capacity" for successful adaptation in face of hardship, whereas Rutter (1990) describes it as a positive outcome.

Current definitions of *resilience* consider it to be a dynamic developmental process whereby the individual and environment engage in mutually influential transactions throughout the lifespan. These transactions ultimately aid the youth's ability to negotiate risks and utilize external and internal resilience factors or developmental assets to bring about positive outcomes. Hence, *resilience as an interactive process* is distinguishable from prior conceptualizations of the *trait-based resiliency* (Luthar, Cicchetti, & Becker, 2000). Importantly, resilience processes can only occur in the context of risk (i.e., particular problems, challenges, and stressors; Glantz & Sloboda, 1999; Morrison et al., 2000). Stated differently, both competent functioning and exposure to adversity must be present when conceptualizing resilience (Masten et al., 1999). This is essentially the undergirding principle of the study of risk and protective factors. Resilience does not occur without the presence of risk.

Despite considering resilience to be a process, certain life conditions have been found to commonly present risks to youth. Decades of longitudinal research have identified common characteristics and experiences of youths and adults who progressed to healthy and productive lives in spite of highly disadvantaged conditions (e.g., poverty, unemployment, mental illness or substance abuse in their families and communities). A synthesis of research identifies three critical factors in building resilience capacity in youth: (a) a caring supportive adult in the life of the child or adolescent, (b) opportunities for involvement in meaningful activities and decisions affecting the young

person's development [what Larson (2000) calls initiative], and (c) high expectations for the behavior of young people (Benard, 1991).

Research on stress, coping, and hardiness has contributed to the development of the construct of resilience (Folkman & Lazarus, 1980, 1988; Lazarus, Averill, & Opton, 1974; Lazarus & Folkman, 1984, 1987). Another related term is "sense of coherence," which is a cognitive and emotional appraisal style associated with effective coping, health-enhancing behaviors and enhanced social adjustment (Antonovsky, 1987). Although at first glance, the coping literature seems to emphasize resiliency as an individual trait or disposition (e.g., hardiness, coping styles), it may also be applied to discussions of resilience as a process. Coping is characterized by a set of cognitive and affective actions that arise in response to a particular concern that is an attempt to restore the equilibrium or to remove turbulence for the individual. This can be done by solving the problem [Morrison et al. (2000) refer to this as thriving] or alternatively, by accommodating the concern without bringing about a solution (Frydenberg & Lewis, 1993), thus leaving the individual vulnerable to future negative effects.

Kohn and O'Brien (1997) categorized coping styles as: (a) *problem focused* – directed at overcoming a harmful or threatening situation; (b) *emotion focused* – emotional ventilation, regulation of emotions or distress; and (c) *avoidance focused* – mentally or physically removing oneself from the threatening situation. In general, problem-focused coping has been found to be a positive correlate, and emotion- and avoidance-focused coping have been found to be a negative correlate of adaptive functioning and stress management (Moos & Schaefer, 1993). However, some researchers have argued that many theoretical and methodological problems in the literature raise questions about the validity of these conclusions (Stanton, Danoff-Burg, Cameron, & Ellis, 1994; Stanton et al., 2000). For example, recent experimental studies (see Pennebaker, Mayne, & Francis, 1997 for a review) have found that emotion-focused coping (i.e., emotional processing and expression) is related to positive physical, psychological, and behavioral outcomes. Moreover studies on individuals under extreme stress from being confronted with a terminal illness have shown benefits of coping through an emotion-focused approach (Stanton et al., 1994, 2000). Indeed, coping is a complex phenomenon and the efficacy of a given coping strategy is dependent on the issue of concern and the context (personal, social, cultural) in which the youth operates.

Within the stress and coping research literature the concept of hardiness has emerged. Hardiness is defined as a personal disposition that is considered a buffering factor increasing the likelihood of reactions that promote resiliency (Wiebe, 1991). Hardiness emphasizes active construction of one's life through the making and implementing of decisions (Maddi, 1997). Hardy individuals are more likely to engage in adaptive coping strategies and are less likely to employ maladaptive responses such as behavioral avoidance or denial. In other words, these individuals cope with stress better because they use particular skills and abilities in stressful situations, such as the ability to seek social support when appropriate.

As discussed previously, protective factors help students in high-risk settings to "overcome the odds" and go on to lead healthy, productive lives (Werner & Smith, 1992). There is a multitude of ways to conceptualize "healthy," "successful" or "positive" development in youth, and this is demonstrated in the medley of empirical investigations focusing on different outcome variables. Essentially, what makes something "protective" is the buffering function it serves on the impact of risk factors as it relates to a particular outcome. An example might be that a child is at risk for violence and aggression (with risk factors being chronic exposure to violence at home and school, minimal parent supervision, and a low level of school membership and bonding) but protective factors are present in this child's life (e.g., high self esteem and social competence, sense of belonging to school, a supportive best friend and

extended family members who serve as positive role models). These protective factors, in some sense, act as a shield and influence this individual to avoid some challenges during adolescence (e.g., school yard fights that lead to suspension), but in the long-term trajectory the individual shows adaptive functioning in this area (indicated by low frequency and severity of adult aggressive behavior). Nevertheless, this individual might report low life satisfaction or significant relationship difficulties, which would suggest that the protective factors of interest did not suffice in terms of its influence on other important outcome variables.

As it can be seen, the task of ascertaining what factors are universally protective or specifically protective for a given developmental outcome or constellation of psychosocial outcomes is arduous and complex. Perhaps a more bona fide statement would be that the presence of protective factors leads students to show "less negative" outcomes than in the absence of these buffering variables. Although this portrayal of resilience or protective factors is not as dramatic, it is promising nonetheless. Moreover, researchers are beginning to examine how to help students move beyond survival mode and enter into the thriving realm (Morrison et al., 2000). In fact, Masten recently suggested that resilience is common, a natural tendency in youth, prompting her to refer to it as "ordinary magic" (Masten, 2001).

As can be seen, there is a need to carefully consider defining constraints regarding protective factors. However, in general, research provides evidence for identifiable clusters of resilience factors that may serve a protective function for various outcomes and these include individual, family, school, community, and cultural variables (Doll & Lyon, 1998; Haggerty, Sherrod, Garmezy, & Rutter, 1994; Sandler, Wolchik, MacKinnon, Ayers, & Roosa, 1997).

Doll and Lyon (1998) identified individual and contextual factors that contribute to resilience. Individual characteristics include: (a) good intellectual ability, (b) language competence, (c) positive temperament or easygoing disposition, (d) positive social orientation including close peer friendships, (e) self-efficacy and self-esteem, (f) achievement orientation with high expectations, (g) flexible coping style, and (h) engagement and initiative in productive activities. Examples of family factors that promote the resilience process are: (a) close affectionate relationship with at least one parent or caregiver; (b) effective parenting (characterized by warmth, structure, and high expectations); and (c) access to warm relationships and guidance from other extended family members. Finally, school and community factors include: (a) access to and relationships with positive adult role models, (b) connections with at least one or a variety of pro-social organizations, and (c) access to responsive schools. Especially important in schools is the support of significant non-parental adults such as teachers (Skinner & Belmont, 1993) and mentors (Nettles, 1991).

MacDonald and Valdivieso (2000) propose another framework for understanding assets and resilience related to desirable outcomes in a youth's life:

- *Aspects of identity* – self-confidence, connection, commitment to others, self-worth, mastery and future orientation, belonging and membership, responsibility, spirituality and self-awareness.
- *Areas of ability* – physical health, mental health, intellectual, employment, civic, as well as social and cultural abilities.
- *Developmental opportunities* – for exploration, expression and creativity, adult roles and responsibilities such as group membership, contribution and service, and employment.
- *Emotional, motivational, strategic supports* – nurturance and friendship, high expectations, standards and boundaries, options assessment and planning, and access to resources.

The importance of the resilience models proposed by Doll and Lyon (1998) and MacDonald

and Valdivieso (2000) is that they can be used to organize assessments of a youth's personal and social resources. In fact, these can be included as content areas in IDEA assessment plans.

The Deficit Momentum

Despite the variety of research and clinical observations regarding the strength-based approach (and its building blocks of resilience, coping, hardiness, and thriving), deficit-based assessment of youth is well integrated into school psychology training and practice. Similarly, this is reflected in the broader state and federal levels of research and policy making with influential studies and national youth reports focusing on measures of negative or undesirable outcomes, such as violence, substance abuse, school dropout, and poverty (MacDonald &Valdivieso, 2000). In accord with this, many treatment programs seek to bring about positive outcomes by curbing risk behaviors. Nonetheless, there is evidence that a shift has begun. For example, some national data resources suggest the importance of measuring positive developmental outcomes (e.g., *Trends in the Well-Being of America's Children and Youth*; U.S. Department of Health and Human Services, 1997).

Researchers in the field of developmental psychopathology have contributed to the emphasis of normal processes of change and adaptation, abnormal reactions to stress, and relationships between the two (Garber, 1984; Garmezy, 1993; Masten & Coatsworth, 1995; Masten & Curtis, 2000). Experts in this field have suggested that developmental trajectories cannot be fully understood without considering both pathology and competence and Masten and Coatsworth (1995) note, "Above all, integrative theories and studies of psychopathology and competence will provide a better scientific foundation for designing policies and programs to foster competence and prevent or ameliorate psychopathology" (p. 744). The authors discuss possible ways that competence and psychopathology can interact: (a) the criteria for judging these two facets of adaptation outcomes overlap, (b) psychopathology interferes with competence, (c) competence failures contribute to psychopathology, and (d) common etiological factors produce effects on both types of outcomes. A focus on psychopathology or deficits is enhanced by simultaneously considering competencies and strengths.

Why use a Strength-Based Approach in Assessment?

A strength-based perspective is not merely the opposite of an orientation that emphasizes deficits or flaws. The paradigm shift of enhancing strengths facilitates a holistic and contextualized conceptualization of the individual instead of focusing solely on what is wrong or maladaptive in the youth's life (Clark, 1999; Scales, Benson, Leffert, & Blyth, 2000). By conducting strength-based assessments, school psychologists recognize the importance of ecological and contextual variables, which leads to a deeper, and arguably, a more appropriate understanding of the youth and his or her social resources. Unique information is to be gleaned from a closer inspection of a youth's strengths that, in turn, facilitates comprehensive intervention planning. Evidence for this is found in the prevention literature, which suggests that resilience or protective factors predict outcomes better than deficit or risk factors alone (Garmezy, 1993; Werner & Smith, 1992). In addition, strength-based assessment data have been utilized in the evaluation of mental health and juvenile justice services (Epstein, Dakan, Oswald, & Yoe, 2001) and child strengths have been found to be related to symptoms, risk, functioning, and to play an important role in determining specific placement and care for children with emotional and behavioral disorders (Oswald, Cohen, Best, & Lyons, 2001).

A strength-based or asset-based perspective also embraces a positivistic and optimistic philosophy. This is in contrast to a psychopathologizing or pessimistic philosophy. Clearly, philosophical underpinnings play a role in how school psychologists, teachers, administrators and school personnel view and treat students and families. The strengths movement has been a catalyst for the

development of assessment and intervention practices based on strength-building, rather than flaw-fixing or deficiency focusing. One direct result from this can be school personnel not having to feel overwhelmed and hopeless by a multitude of problems – instead focusing on positive aspects and competencies raises optimism, hope, and motivation for change (Clark, 1999, Constantine et al., 1999). In addition, its endorsement can empower children and families to take responsibility and navigate their own life experiences.

The knowledge gleaned from research on strengths, resilience, hardiness, and positive youth development provides a context for understanding efforts to increase the use of strength-based perspectives in school psychology practice. It is important to give credence to youth, along with family members and other key agents in the schools, community and broader social context, who provide opportunities for youth to develop positively in today's complex society. The following section considers how the strength-based perspective is used in emotional and behavioral assessments and illustrates two recently developed instruments, the *Behavioral and Emotional Rating Scale*, BERS (Epstein & Sharma, 1998) and the *California Health Kids Survey Resilience Module*, CHKS (Constantine et al., 1999).

Strength-Based Assessments

A variety of instruments are available for the school psychologist to objectively assess variables related to strengths and resiliency (e.g., self-esteem measures, behavior rating scales such as the *Behavior Assessment Scale for Children*, BASC; Reynolds & Kamphaus, 1992, hardiness scales such as the *Personal Views Survey II*, PVS II; Maddi, 1997, stress and coping scales such as the *Life Stressors and Social Resources Inventory*; Moos & Moos, 1997, or the *Coping Inventory for Stressful Situations*, CISS; Parker & Endler, 1992, to name a few). Nonetheless, to date, there is a dearth of norm-referenced measures that focus primarily on and are theoretically derived from a strength-based perspective. Epstein (1999) notes that, in the absence of formalized assessment measures, school psychologists have relied on their intuitive beliefs about the importance of strengths as they relate to youth functioning:

> Strength-based assessment, as practiced, has been implemented in an informal fashion…[and while this] has been valuable in furthering the concept of strength assessment, it also raises serious questions regarding the fidelity of the data collection process…the reliability and validity of the data, and the value of the data as a clinical service planning or outcome measure. (p. 4)

A few strength-based instruments that have been developed and published are useful for child and adolescent assessment purposes, particularly in the school setting (e.g., *Behavioral Emotional Rating Scale*, BERS; Epstein & Sharma, 1998; *California Healthy Kids Survey-Resilience Module*, CHKS; Constantine et al., 1999; *Child and Adolescent Strengths Assessment Scale*, CASA; see Lyons, Uziel-Miller, Reyes, & Sokol, 2000; and the *Strengths and Difficulties Questionnaire*, SDQ; see Goodman, 1999). We have chosen to present two measures: the empirically-based BERS (Epstein & Sharma, 1998) and the theoretically-based CHKS (Constantine et al., 1999). Both measures were selected because they are practical for use by school psychologists and easy to administer. In addition, the CHKS should be of particular interest to school psychologists as it is currently being normed in California.

Both the BERS and the CHKS measure individual strengths, yet each brings a unique perspective through their respective conceptualization, operationalization, and measurement of these constructs. Generally, both have strong psychometric properties and have been created for use within the school and research settings.

Behavioral and Emotional Rating Scale (BERS). The BERS is a 52-item rating scale of youth emotional and behavioral strengths and can be completed by teachers, clinicians, or parents for youth ages 5 to 18 years (Epstein, 1998). [Youth and updated parent-only versions of the BERS are currently in development (Michael Epstein, personal communication, May 2001.)] In its present

format, the items form five factors or domains:

- *Interpersonal Strengths:* characterized by the ability to control emotions and behaviors within social situations (e.g., "accepts no for an answer," total items in scale = 22);
- *Affective Strength:* considered as the ability to accept and express feelings from/to others (e.g., "accepts a hug," total items in scale = 11);
- *Family Involvement:* taps the degree of participation and relationship with one's family (e.g., "participates in family activities," total items in scale = 9);
- *School Functioning:* measures competence displayed in school tasks (e.g., "completes tasks on time," total items in scale = 11); and
- *Intrapersonal Strengths:* characterized by one's perception of his or her abilities and competence (e.g., "enthusiastic about life," total items in scale = 13).

Each item is rated on a Likert scale ranging from 0 (not at all like the child) to 3 (very much like the child). When converted to standard scores, the BERS subsbscale means are 10 (standard deviation = 3) and the overall Strength Quotient (calculated by summing across the five standard subscale scores) has a mean of 100 (standard deviation = 15; higher scores reflect greater perceived strength).

The BERS was empirically developed from parents' and mental health, social service, and education professionals' descriptions and statements of youth behaviors and emotions that demonstrate strengths by employing a Delphi methodology (Epstein & Sharma, 1998). Alpha coefficients for the five BERS factors are strong, ranging from .91 (School Functioning) to .98 (Interpersonal Strengths). With respect to validity evidence, the BERS has been shown to discriminate between emotionally disturbed (ED) and non-ED youth. Additional convergent validity, test-retest, and inter-rater reliability studies (Epstein, Harniss, Pearson, & Ryser, 1999; Friedman, Leone, & Friedman, 1999; Harniss, Epstein, Ryser, & Pearson, 1999) support the psychometric properties of the BERS. Data from these studies are summarized in Table 1.

Because school psychologists will use the BERS with both teachers and parents, it is useful to consider the consistency of these cross-informant responses. The correlations between parent-teacher ratings are significant (Friedman et al., 1999), but in contrast to those for teacher-teacher ratings (Epstein et al., 1999) are lower. For the *Intrapersonal Strengths* subscale, the correlations between parents and teachers ratings is nonsignificant. In an analysis of subscale means, Freidman et al. (1999), found teacher scores, relative to parent scores, to be lower on *Family Involvement* and higher on *School Functioning*. Therefore teachers and parents provide different ratings, suggesting that they evaluate BERS items differently. Epstein's planned addition of a parent-rated BERS will help to tease out and further explicate what both parents and teachers perceive to be most salient aspects of youth strengths.

When incorporating the BERS into an assessment protocol, it is important to note that most of the studies on the BERS, to date, have included relatively low numbers of racial/ethnic minority youth, the exception to this was the test-retest reliability portion of Epstein et al. (1999) study, with 46% of this sample being non-white. One study has found that the BERS may have promise in helping to identify which youth are most likely to successfully complete a required probation program (Pobanz & Furlong, 2000). The application and utility of the BERS in practice and research is further discussed in the recommendations section.

California Healthy Kids Survey—Resilience Module (CHKS). Supported by the California Department of Education, the CHKS is composed of seven modules assessing areas such as the use of alcohol, tobacco, and other drugs, violence and school safety, nutrition and physical activity. It is a public domain instrument that can be accessed at the WestEd website (www.wested.org/hks).

Table 1
Behavioral Emotional Rating Scale (BERS) Validity and Reliability Data

Study and Analysis	BERS Topic Area	Interpersonal Strengths	Family Involvement	School Functioning	Affective Strengths	Interpersonal Strengths	Strength Quotient
Epstein & Sharma (1998)							
Alpha coefficients (for five subscales)	Scale development	.98	.96	.95	.93	.95	n/a
Harniss, Epstein, Ryser, & Pearson (1999)							
Correlations coefficients (for selected Walker-McConnell subscales)	Convergent validity	.80[a] (Self-Control)	.39[c] (School adjustment)	.85[a] (School adjustment)	.74[a] (Empathy)	.72[a] (Peer Relations)	.77[a] (Total)
Correlation coefficients (for selected Teacher Report Form scales)		-.72[a] (Externalizing)	-.39[b] (Externalizing)	-.51[a] (Total Problem)	-.39[b] (Externalizing)	-.33[c] (Externalizing)	-.72[a] (Externalizing)
Friedman, Leone, & Friedmen (1999)							
Correlation coefficients (parent-teacher ratings)	Inter-rater reliability	.60[c]	.59[c]	.67[c]	.51[d]	.20(ns)	n/a
Epstein, Harniss, Pearson, & Ryser (1999)							
Correlation coefficients (teacher-teacher ratings)	Inter-rater reliability	.83[a]	.96[a]	.89[a]	.85[a]	.92[a]	.98[a]
Correlation coefficients (two-week duration)	Test-Retest reliability	.86[a]	.99[a]	.95[a]	.85[a]	.93[a]	.99[a]

a = $p < .0001$; b = $p < .001$; c = $p < .01$; d = $p < .05$

Currently, there are three versions available: elementary, middle, and high school. The most recent addition to the CHKS is the Resilience Module (Constantine et al., 1999). Version 2.1 consists of 68 items that tap 19 developmental strengths or assets that research has found to be associated with positive youth development and protection from health-risk behaviors. Both externally situated strengths (e.g., the presence of caring relationships, high expectations, and opportunities to participate in meaningful activities), and internally-situated strengths (e.g., social competence, autonomy, sense of meaning, and purpose) are represented in the CHKS-Resilience Module.

In considering externally situated factors, Constantine et al. (1999) state, "The predictive power of these external resilience factors lies in their ability to meet basic human developmental needs for safety, connection, belonging, identity, respect, mastery, power, and ultimately, meaning" (p. 6). These external or environmental contexts form the space from which internally located traits may or may not flourish. Internally situated traits then:

> ...are considered to be the outcomes—not causes—of the developmental process of meeting basic human needs [like safety, connection, etc.]. Resilience theory provides that resilience is an inner force, 'a self-righting tendency' (Werner & Smith, 1992, p. 202) driving this developmental process. (p. 6)

Research is continuing with Version 2.1 of the CHKS-Resilience Module[1] and psychometric tests from the prototype development found moderate to high alpha coefficients for subscales, ranging from .55 to .88. The exception to this was the *Meaningful Participation in the Community* subscale, which had "low reliability and new items were [subsequently] written to be assessed in the next phase of the field test" (Constantine et al., 1999, p. 7). Also, the alpha coefficients, when compared across socioeconomic groups, were greatest for high SES populations. To address reliability and validity concerns, Version 2.1 includes five response-set breakers (negatively worded items) and three reliability check items ("I answered the questions on this survey honestly," "I answered the questions on this survey carefully," and "I understood the questions on the survey"). Constantine et al. note they are conducting additional validity and test-retest reliability analyses as well as developing Spanish and elementary versions of the Resilience Module.

[1] Version 3.0 of the middle and high school forms of the Resilience Module contain 56 items; resilience items are embedded within the CHKS for the elementary school form. An update of the CHKS is in progress. (Norm Constantine, personal communication, July 18, 2001). [On-line] Available: www.wested.org/hks.

Recommendations for School Psychologists

Embracing a strength-based perspective is in line with national initiatives, for example, the U.S. Department of Education (1994), *National Agenda for Achieving Better Results for Children and Youth with Serious Emotional Disturbance*, has determined the need for a strength-based approach to assessment. Such an approach to assessment fortifies the practice of school-based consultation, collaboration, and intervention. Furthermore, school psychologists have a responsibility to provide and foster developmental support and opportunities to enhance functioning in students. These principles are reflected in national and state school psychology standards. The National Association of School Psychologists (NASP) *Training Standards 2.7—Prevention, Crisis Intervention, and Mental Health* stipulates that "school psychologists provide or contribute to prevention and intervention programs that promote mental health and physical well-being of students." Moreover, the California Commission on Teacher Credentialing—Pupil Personnel-School Psychology Specialization *Standard 21—Wellness Promotion, Crisis Intervention, and Counseling*, maintains that "candidates are prepared to help design, implement and evaluate wellness, prevention, intervention, and other mental health programs." The new California training standards also suggest that

other considerations be included in the preparation of school psychologists. These pertain to how well they (a) through their own example, model for others wellness and personal resilience; (b) display the ability to design and operate programs that promote school-family partnerships to enhance pupils' social emotional development; and (c) implement prevention and wellness promotion activities across a broad range of age levels and with a variety of potential problems.

Following these new training standards, school psychologists can foster "capacity-building" in children and adolescents to deal with life challenges. As previously discussed, resilience and wellness are not considered to be static, but rather, changing levels of conditions of readiness, disposition, or capacity. School psychologists need to assess the level of support necessary and facilitate the provision of optimal conditions, with poised guidance, as some life challenges are necessary stepping stones for wellness and thriving. The complexity of this issue is apparent, but the ideology is simple, albeit fundamentally different, in that the focus is not solely on eliminating risks and deficits. It is likely that school psychologists can bring vitality to fostering resilience and promoting asset-building in youth and families.

CONCLUSION

This article has focused on school psychologists' active participation in wellness promotion and the need to look more broadly at strength-based issues. This optimistic approach seeks knowledge about how children and adolescents live life "well" and what they should, would, and could do to develop successfully and achieve enhanced functioning, in contrast to focusing on shortcomings and emphasizing what they should not, could not, and would not do. We presented an overview of the strength-based approach to working with youth, examples of two strength-based instruments, and recommendations for school psychologists to apply theory and research to practice. School psychologists can take a leadership role in advocating for the strength-based approach when issues of emotional and behavioral challenges arise, which serves to facilitate recognition among families, teachers, and administrators of existing or potential external assets and internal resources that can have a profound impact on the positive developmental outcomes of youth.

REFERENCES

Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist 4-18 and 1991 profile.* Burlington, VT: University of Vermont, Department of Psychiatry.

Anthony, E. J. (1987). Risk, vulnerability, and resilience: An overview. In E. J. Anthony & B. Cohler (Eds.), *The invulnerable child* (pp. 3-48). New York: Guilford Press.

Antonovsky, A. (1987). *Unraveling the mystery of health: How people manage stress and stay well.* San Francisco: Jossey-Bass.

Benard, B. L. (1991). *Fostering resilience in kids: Protective factors in the family, school, and community.* San Francisco: Far West Laboratory for Educational Research and Development.

Butler, K. (1997). The anatomy of resilience. *The Family Therapy Networker, 21,* 22-31.

California Commission on Teacher Credentialing. (2001). *Standards of quality and effectiveness for Pupil Personnel Services Credentials: School Counseling, School Psychology, School Social Work, Child Welfare and Attendance.* Sacramento, Ca: Author. [Online]. Available: www.ctc.ca.gov/profserv/programstandards/pps/pps.pdf

Calhoun, L. G., & Tadeschi, R. G. (1998). Beyond recovery from trauma: Implications for clinical practice and research. *Journal of Social Issues, 54,* 357-371.

Caplan, G. (1964). *Principles of preventive psychiatry.* New York: Basic Books.

Carver, C. S. (1998). Resilience and thriving: Issues, models, and linkages. *Journal of Social Issues, 54,* 245-266.

Cicchetti, D., & Garmezy, N. (1993). Prospects and promises in the study of resilience. *Development and Psychopathology, 5,* 497-502.

Clark, M. D. (1999). *Strength-based practice: The ABC's of working with adolescents who don't want to work with you.* [Online]. Available: www.drugs.indiana.edu/prevention/assets/asset2.html

Connell, J. P., Spencer, M. B., & Aber, J. L. (1994). Educational risk and resilience in African-American youth: Context, self, action, and outcomes in school. *Child Development, 65,* 494-506.

Constantine, N., Benard, B., & Diaz, M. (1999). *Measuring protective factors and resilience traits in youth: The Healthy Kids Resilience assessment.* Paper presented at the Seventh Annual Meeting of the Society for Prevention Research, New Orleans, LA.

Cowan, P., Cowan, C. P., & Schultz, M. (1996). Thinking about risk and resilience in families. In E. M. Hetherington & E. Blechman (Eds.), *Stress, coping and resilience in children and families* (pp. 155-172). Mahwah, NJ: Lawrence Erbaum.

Deci, E. L. (1995). *Why we do what we do: The dynamics of personal autonomy.* New York: Putnam.

Doll, B., & Lyon, M. A. (1998). Risk and resilience: Implications for the delivery of educational and mental health services in schools. *School Psychology Review, 27,* 348-363.

Egeland, B., Carlson, E., & Stroufe, L. A. (1993). Resilience as a process. *Development & Psychopathology, 5,* 517-528.

Epstein, M. H. (1999). The development and validation of a scale to assess the emotional and behavioral strengths of children and adolescents. *Remedial & Special Education, 20,* 258-263.

Epstein, M. H., Dakan, E., Oswald, D., & Yoe, J. T. (2001). *Using strength based data to evaluate children's mental health programs.* Unpublished manuscript, University of Nebraska-Lincoln.

Epstein, M. H., Harniss, M. K., Pearson, N., & Ryser, G. (1999). The Behavioral and Emotional Rating Scale: Test-retest and inter-rater reliability. *Journal of Child and Family Studies, 8,* 319-327.

Epstein, M. H., & Sharma, J. (1998). *Behavioral and Emotional Rating Scale: A strength-based approach to assessment.* Austin, TX: PRO-ED.

Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior, 21,* 219-239.

Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology, 54,* 466-475.

Friedman, K. A., Leone, P. E., & Friedman, P. (1999). Strength-based assessment of children with SED: Consistency of reporting by teachers and parents. *Journal of Child & Family Studies, 8,* 169-180.

Frydenberg, E., & Lewis, R. (1993). Boys play sports and girls turn into others: Age, gender and ethnicity as determinants of coping. *Journal of Adolescence, 16,* 253-266.

Furlong, M. J., Casas, J. M., Woodbridge, M., Sosna, T., Zanglis, L., Pavelski, R., & Turner, J. (2000). *Santa Barbara County Multiagency Integrated System of Care evaluation summary.* [Online]. Available: www.education.ucsb.edu/~sbmisc/pdf%20files/MISC-Final-10-04-00.pdf

Garber, J. (1984). Classification of childhood psychopathology: A developmental perspective. *Child Development, 55,* 30-48.

Garmezy, N. (1993). Children in poverty: Resilience despite risk. *Psychiatry, 56,* 127-136.

Garmezy, N., & Rutter, M. (Eds.). (1983). *Stress, coping, and development in children.* Baltimore, MD: Johns Hopkins University Press.

Gest, S., Neeman, J., Hubbard, J. J., Masten, A. S., & Tellegen, A. (1993). Parenting quality, adversity, and conduct problems in adolescence: Testing process-oriented models of resilience. *Development and Psychopathology, 5,* 663-682.

Glantz, M. D., & Sloboda, Z. (1999). Analysis and reconceptualization of resilience. In M. D. Glantz & J. L. Johnson (Eds.), *Resilience and development: Positive life adaptations* (pp. 109-126). New York: Kluwer/Plenum.

Goodman, R. (1999) The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. *Journal of Child Psychology & Psychiatry & Allied Disciplines, 40,* 791-799.

Gore, S., & Eckenrode, J. (1994). Context and process in research on risk and resilience. In R. Haggerty, L. Sherrod, N. Garmezy, & M. Rutter (Eds.), *Stress, risk, and resilience in children and adolescents. Processes, mechanisms, and interventions* (pp. 19-63). New York: Cambridge University Press.

Haggerty, R. J., Sherrod, L., Garmezy, N., & Rutter, M. (Eds.). (1994). *Stress, risk, and resilience in children and adolescents: Processes, mechanisms, and intervention.* New York: Cambridge University Press.

Harniss, M. K., Epstein, M. H., Ryser, G., & Pearson, N. (1999). The Behavioral and Emotional Rating Scale: Convergent validity. *Journal of Psychoeducational Assessment, 17,* 4-14.

Hoyt, M. (1996). *Constructive therapies Vol. 2.* New York: Guilford Press.

Kaplan, H. (1999). Toward an understanding of resilience: A critical review of definitions and models. In M. Glantz & J. Johnson (Eds.), *Resilience and development: Positive life adaptations.* New York: Plenum Press.

Kelley, M. S. (1998). Ecological assessment: A study of school psychology assessment practices in Massachusetts. (Doctoral dissertation, Boston University, 1998). *Dissertation Abstracts International, 58,* AAM9815002.

Kohn, P. M., & O'Brien, C. (1997). The situational response inventory: A measure of adaptive coping. *Personality and Individual Differences, 22,* 85-92.

Kretzman, J. P., & McNight, J. L. (1993). *Building communities from the inside out.* Evanston, IL: Northwestern University, Center for Urban Affairs and Policy Research.

Lambert, N. M. (1964). *The protection and promotion of mental health in schools.* (Public Health Service Publication No. 1226. 4003342015). Washington DC: U.S. Dept. of Health, Education, and Welfare, Public Health Service, National Institutes of Health, National Institute of Mental Health.

Larson, R. W. (2000). Toward a psychology of positive youth development. *American Psychologist, 55,* 170-183.

Lazarus, R. S., Averill, J. R., & Opton, E. M. (1974). The psychology of coping: Issues of research and assessment. In G. V. Coelho, D. A. Hamburg, & J. E. Adams (Eds.), *Coping and adaptation* (pp. 249-315). New York: Basic Books.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping.* New York: Springer.

Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions. *European Journal of Personality, 1,* 141-169.

Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development, 71,* 543-562.

Luthar, S., & Cushing, G. (1999). Measurement issues in the empirical study of resilience: An overview. In M. Glantz & J. Johnson (Eds.), *Resilience and development: Positive life adaptations* (pp. 129-160). New York: Plenum Press.

Lyons, J. S., Uziel-Miller, N. D., Reyes, F., & Sokol, P. L. (2000). Strengths of children and adolescents in residential settings: Prevalence and associations with psychopathology and discharge placement. *Journal of the American Academy of Child & Adolescent Psychiatry, 39,* 176-181.

MacDonald, G. B., & Validivieso, R. (2000). *Measuring deficits and assets: How we track youth development now, and how we should track it.* Washington, DC: Academy for Educational Development, Center for Youth Development and Policy Research.

Maddi, S. R. (1997). Personal Views Survey II: A measure of dispositional hardiness. In C. P. Zalaquett, & R. J. Wood (Eds.). *Evaluating stress: A book of resources* (pp. 293-309). Lanham, MD: Scarecrow Press.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56,* 227-238.

Masten, A. S., Best, K., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcame adversity. *Development and Psychopathology, 2,* 425-444.

Masten, A., & Coatsworth, D. (1995). Competence, resilience, and psychopathology. In D. Cicchetti & D. Cohen (Eds.), *Developmental psychopathology, Volume 2: Risk, disorder, and adaptation* (pp. 715-752). New York: Wiley.

Masten, A. S., & Curtis, W. J. (2000). Integrating competence and psychopathology: Pathways toward a comprehensive science of adaptation in development. *Development & Psychopathology, 12,* 529-550.

Masten, A. S., Hubbard, J. J., Gest, S. D., Tellegen, A., Garmezy, N., & Ramirez, M. (1999). Competence in the context of adversity: Pathways to resilience and maladaption from childhood to late adolescence. *Development and Psychopathology, 11,* 143-169.

Miller, G. E., Brehm, K., & Whitehouse, S. (1998). Reconceptualizing school-based prevention for antisocial behavior within a resilience framework. *School Psychology Review, 27,* 364-379.

Moos, R. H., & Moos, B. S. (1997). Life Stressors and Social Resources Inventory: A measure of adults' and youths' life contexts. In C. P. Zalaquett & R. J. Wood (Eds.), *Evaluating stress: A book of resources* (pp. 177-190). Lanham, MD: Scarecrow Press.

Moos, R. H., & Schaefer, J. A. (1993). Coping resources and processes: Current concepts and measures. In L. Goldberger & S. Breznitz (Eds.), *Handbook of stress: Theoretical and clinical aspects*. New York: Free Press.

Morrison, G., Furlong, M., & Morrison, R. (2000). Beyond resilience: Building relationship to promote thriving. *Reaching Today's Youth: The Community of Circle Caring Journal, 5*, 72-76.

Mrazek, P. J., & Haggerty, R. (Eds.). (1994). *Reducing risks for mental disorders: Frontiers for preventive intervention research*. Washington, DC: National Academy Press.

National Association of School Psychologists. (2000). *Standard for training and field placement programs in school psychology: Standard for the credentialing of school psychologists*. Bethesda, MD: Author. Retrieved April 9, 2001, from the World Wide Web: http://www.naspweb.org/pdf2000%20training%20&%20credentialing%20standards

Nettles, S. M. (1991). Community involvement and disadvantaged students: A review. *Review of Educational Research, 61*, 379-406.

Nettles, S. M., Mucherah, W., & Jones, D. S. (2000). Understanding resilience: The role of social resources. *Journal of Education for Students Placed at Risk, 5*, 47-60.

Nettles, S. M., & Pleck, J. H. (1994). Risk, resilience, and development: The multiple ecologies of Black adolescents in the United States. In R. J. Haggerty, N. Garmezy, M. Rutter, & L. Sherrod (Eds.), *Stress, risk, and resilience in children and adolescents: Processes, mechanisms, and intervention* (pp. 147-181). New York: Cambridge University Press.

O'Leary, V. E. (1998). Strength in the face of adversity: Individual and social thriving. *Journal of Social Issues, 54*, 425-446.

Oswald, D. P., Cohen, R., Best, A. M., & Lyons, J. S. (2001). *The role of child strengths in the determination of level of care for children with emotional and behavioral disorders*. Unpublished manuscript, Virginia Commonwealth University.

Parker, J. D., & Endler, N. S. (1992). Coping with coping assessment: A critical review. *European Journal of Personality, 6*, 321-344.

Pennebaker, J. W., Mayne, T. J., & Francis, M. E. (1997). Linguistic predictors of adaptive bereavement. *Journal of Personality and Social Psychology, 58*, 519-527.

Pobanz, M., & Furlong, M. J. (2000). *Using protective factors to enhance the prediction of negative short-term outcomes of first-time juvenile offenders*. Paper presented at the meeting of the Teacher Educators of Children and Behavior Disorders, Pheonix, AZ.

Quay, H. C. (1986). Classification. In H. C. Quay & J. S. Werry (Eds.), *Psychopathological disorders of childhood* (3rd ed., pp. 1-34). New York: Wiley.

Rapp, C. A. (1997). Preface. In D. Saleeby (Ed.), *The strengths perspective in social work practice*. New York: Longman.

Reynolds, C. R., & Kamphaus, R. W. (1992). *Behavior Assessment System for Children (BASC)*. Circle Pines, MN: American Guidance Services.

Robertson, L. M., Harding, M. S., & Morrison, G. M. (1998). A comparison of risk and resilience indicators among Latino a students: Differences between students identified as at-risk, learning disabled, speech impaired and not at-risk. *Education & Treatment of Children, 21*, 333-35.s.

Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. S. Masten, D. Cicchetti, K. H. Nuechterlein, & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology* (pp. 181-214). New York: Cambridge University Press.

Sandler, I. N., Wolchik, S. A., MacKinnon, D., Ayers, T. S., & Roosa, M. W. (1997). Developing linkages between theory and intervention in stress and coping processes. In S. A. Wolchik & I. N. Sandler (Eds.), *Handbook of children's coping: Linking theory and intervention* (pp. 3-40). New York: Plenum.

Scales, P. C., Benson, P. L., Leffert, N., & Blyth, D. A. (2000). Contribution of developmental assets to the prediction of thriving among adolescents. *Applied Developmental Science, 4*, 27-46.

Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology, 85*, 571-581.

Smokowski, P. R., Reynolds, A. J., & Bezruczko, N. (1999). Resilience and protective factors in adolescence: An autobiographical perspective from disadvantaged youth. *Journal of School Psychology, 37*, 425-448.

Stanton, A. L., Danoff-Burg, S., Cameron, C. L., Bishop, M., Collins, C. A., Kirk, S. B., & Sworowski, L. A. (2000). Emotionally expressive coping predicts psychological and physical adjustment to breast cancer. *Journal of Consulting and Clinical Psychology, 68*, 875-882.

Stanton, A. L., Danoff-Burg, S., Cameron, C. L., & Ellis, A. P. (1994). Coping through emotional approach: Problems of conceptualization and confounding. *Journal of Personality and Social Psychology, 66*, 350-362.

U. S. Department of Education. (1994). *National agenda for achieving better results for children and youth with severe emotional disturbances*. Washington DC: Author.

Walker, H. M., & McConnell, S. R. (1995). *The Walker-McConnell Scale of Social Competence and School Adjustment-Adolescent Version*. San Diego, CA: Singular Publishing Group.

Wang, M. C., & Gordon, E. W. (Eds.). (1994). *Educational resilience in inner-city America: Challenges and prospects*. Hillsdale, NJ: Lawrence Erlbaum.

Wieck, A., Rapp, C., Sullivan, W. P., & Kisthardt, S. (1989). A strengths perspective for social work practice. *Social Work, 34*, 350-354.

Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Ithaca, NY: Cornell University Press.

Wiebe, D. J. (1991). Hardiness and stress moderation: A test of proposed mechanisms. *Journal of Personality and Social Psychology, 60*, 89-99.

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Problem Solving Student Support Teams

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The on-going efforts to improve Student Support Teams (SST) within a large, urban California school district are presented. The major goal of this reform has been to reshape the SSTs to focus on empirically supported interventions and data based decision making rather than student deficit and disability. Preliminary evaluation results indicate that these reform efforts increased the efficacy and effectiveness of the SST and led to a decline in over-representation of African American students referred to special education. Specific components of effective SSTs (i.e., organization and management, teamwork, and problem-solving strategies) in use in the district pilot program are described in order to assist other California School Psychologists in implementing SSTs that foster widespread commitment among the faculty and improve educational outcomes for students. These components are summarized in a Self-Study Guide Check List that school psychologists and other members of the SST may use to evaluate and reflect on the SSTs at their sites. The implications for the types of services school psychologists provide when embracing a problem solving rather than medical model for servicing students are briefly examined, as well as the limitations of the current categorical system in which we serve students with disabilities.

There is a substantial body of research to support the positive impact of school-based intervention and pre-referral teams. For example, school-based intervention teams have led to increased academic learning time (Kovaleski, Gickling, Morrow, & Swank, 1999), and decreased referral and special education placement (Fuchs, Fuchs, & Bahr, 1990; Ysseldyke & Marston, 1999). In addition, school-based intervention teams appear to increase collaboration among general and special education teachers (Kovaleski, Tucker, & Stevens, 1996) and between school personnel and parents (Will, 1986).

The concept of multipdisciplinary teams collaborating to identify and implement interventions in order to promote school success in the general education curriculum has been around for over 15 years (Graden, Casey, & Christenson, 1985). Most recently, 1997 Amendments to the Individuals with Disabilities Education Act (IDEA) cite prereferral interventions as essential to making appropriate referrals to special education (U.S. Congress, 1997). Intervention teams are commonly discussed within the field of school psychology. For example, the 2000 National Association of School Psychologists Convention hosted over 10 paper presentations and poster sessions on topics related to intervention teams. Given the empirical, legislative and professional support for school-based intervention teams, it is not surprising that many schools have them in place.

An informal survey in the fall of 2000 found that *all* of 26 school psychology graduate students surveyed (who represent over 35 schools in 19 different southern California districts) reported that their school or schools had a functioning SST. The perception of having a SST may be almost universal in southern California, however, the function and quality of the SST appears to vary dramatically. This dramatic variation was apparent even within one large-urban school district. A 1999 survey of the district school psychologists

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indicated that there was great variability among the SST activities. For example, among the 46 schools represented by these survey results, SSTs were a regularly scheduled activity in 62% of the schools, only 30% of the teams assigned a consultant to follow-up and supported the classroom teachers in implementing interventions, and fewer than one third of the teams routinely re-met on students to examine the effectiveness of the intervention. Furthermore, fewer than 12% of the teams reported collecting on-going, progress monitoring data to determine the effectiveness of the intervention plans. Finally, state reported statistics indicated that SSTs were not successful in reducing the over-representation of African American students and under-representation of Hispanic students in special education programs (California Department of Education, 2000). Therefore, the question facing many districts around California, is not whether Student Support Teams are in place, but what is the quality and effectiveness of those teams?

REFORMING THE SST: ONE SCHOOL'S SUCCESS STORY

The impetus for reforming the SST in a large urban district highlighted in this article began, like many reform efforts, in a single school. A group of teachers and the school psychologist and counselor met to identify strengths and weakness of the school's current SST and to develop an improvement plan. The major focus of the plan was on implementing a problem-solving SST. Additional modifications to the SST included changing the team members to include more general educators and fewer special educators, assigning a consultant to every case to assist the referring teacher, and reallocating resources to hold more meetings. Prior to presenting this plan to the school staff during a faculty meeting, the teachers, counselor, and administrators were surveyed about the current SST (N=20). These survey results provided baseline data to gauge the effectiveness of the efforts to reform the SST. After one year of reform, the same staff completed the survey again (N=22). Independent t-tests comparing the responses in 1998 to the responses in 1999 were conducted for select survey items. These results, summarized in Table 1, indicate a major shift in the teachers' perceptions of the SST. For example, most teachers no longer found the SST to be unfocused, unsupportive, and ineffective.

In addition to improved teacher perceptions about the SST, students also appeared to benefit from the new procedures. For example, almost four times the number of students were served under the new model than the previous year (43 versus

Table 1
Teacher Perceptions of the SST Before and After the Pilot Year

Item	Percent Agree	
	1998	1999
The SST is a waste of my time	50%	0*
The SST is just a "hoop" to jump through to get special education services for a student.	63%	18%*
The SST had clear direction	65%	100%*
There was good follow-though by my colleagues after the SST	17%	85%*
The student's major difficulty was defined during the SST	50%	91%*
The intervention identified by the SST matched the student's needs	38%	90%*
The SST leads to positive outcomes for students	60%	76%*

*Significant difference from prior year response; $p < .01$.

12 students), yet, the number of students referred and found eligible to received special education services remained constant. Furthermore, for the first time in years, African American students were not over-represented in the referral and placement into special education at this school. The proportion of each minority group (e.g., African American, Hispanic and Asian American) referred and found eligible to receive special education were comparable to the overall demographics of the school. Additional significant benefits include: follow-up meetings were held for 81% of the students, two thirds of the students met their intervention goals (goal setting and evaluation is described in greater detail in the section describing problem-solving activities), and parental attendance of SST meetings doubled.

The success of reforming the SST at this one school triggered a district-level effort to improve all SSTs. A district multidisciplinary team was formed and 20 schools were selected to receive intense training and support. The major focus of this effort was to train teams in problem solving. Problem solving is an empirically supported strategy for identifying and monitoring interventions (Ysselydke & Marston, 1999). Problem solving is distinct from traditional refer-test-place models because student challenges are addressed from an ecological rather than psychometric perspective. For example, decisions about special education eligibility are based on responsiveness to education interventions rather than a search for disability within the child (Tilly, Reshely, & Grimes, 1999).

In addition to introducing problem solving to the targeted schools, the organization and management of the SST and the team's ability to work together toward a common goal were addressed by the trainings. In fact, it is sometimes necessary to address team process and procedural variables prior to focusing on problem solving strategies (Telzrow, McNamara, & Hollinger, 2000).

The successes and challenges encountered as each of these 20 SSTs attempt to implement and sustain a problem solving model can be a resource for teams interested in engaging in similar reform. Based on the current literature on school reform, problem solving and consultation and on lessons learned from the efforts underway in this large, urban California school district, some features of effective SSTs are described next.

FEATURES OF EFFECTIVE PROBLEM SOLVING STUDENT SUPPORT TEAMS

Picture a highly effective SST. You may envision regularly scheduled meetings of multidisciplinary staff and parents that focus on examining data to identify a student's need and then developing interventions based on those needs. You may also imagine the team meeting again later to follow-up on the outcome of the interventions and to decide the next course of action based on data collected during the intervention. This is the ideal.

Unfortunately, in reality, many teams are less than effective. These teams meet irregularly, typically when a student or teacher is in crisis, spend a lot of time "admiring the problem" rather than identifying solutions, and suggest similar uncreative intervention ideas for each case. These ineffective meetings typically result in one of two scenarios (a) the referring teacher and/or parent leaves the meeting frustrated by the laundry list of intervention ideas that they are expected to implement with little or no support, or (b) the student is referred to special education. In the latter case, the meeting has served as a "capitulation conference" rather than an intervention meeting. In the former case, it is highly likely that the same student will be referred to the student support team again the next year. However, next year's team will be unable to answer two very important questions: "Were the interventions identified during the previous year implemented?" and, if they were implemented, "Did the interventions work?" When teams fail to re-meet and evaluate the fidelity in which an intervention plan is implemented and the effectiveness of the plan, the teams are basically starting from scratch the next time the student is referred because they do not have information on the success or failure of previous interventions.

School psychologists should not assume that robust pre-referral interventions have been at-

tempted for a student who has been the topic of a single or multiple SST meetings. Kovaleski and colleagues (1999) demonstrated that student improvement was linked to the quality of the school-based intervention teams. They found that teams that failed to fully implement the intervention team process as designed were no more successful in improving students' outcomes than schools that had no intervention team in place. Therefore, psychologists should not conclude that a SST's failure to improve student outcomes warrants extreme interventions such as special education, grade retention, or serious disciplinary action for individual students. Rather, psychologists should evaluate the quality of their SST and strive to improve the SST at their site if it is failing to invoke change in many students' behavior. A self-study checklist is included in Table 2 to assist school psychologists and other SST members in identifying areas of strength and weakness within their team process. These characteristics of effective SSTs are grouped into three broad categories (a) organization and management issues, (b) teamwork, and (c) problem-solving strategies. They are described below along with some trouble-shooting ideas.

Organization and management are factors that are necessary but not sufficient to ensuring an effective SST. Poor organization and mismanagement can result in disorganized meetings, failure to document decisions, and generally high levels of frustration among the team members. The organization and management features of a SST discussed below are: making a referral, scheduling meetings, length of the meeting, pace and focus of the meeting, and dissemination of the results.

Organization and Management

Making a referral. The first aspect of a school's SST to consider is the referral process. Do teachers and parents understand how to make a referral to the SST? It is common for new teachers to not know about the SST at their school; therefore, they are unlikely to access it as a resource. Consider introducing the SST process every year to the staff of your school, and perhaps develop a brochure on SSTs to be sent to parents. Sometimes even veteran teachers are unsure of how to make a referral. In some schools, a referral may come in the form of a verbal request to the psychologist, or a scribbled note in the counselor's mailbox, or a phone message to the principal from a parent. Without a standard referral system, such requests for assistance may be lost in the general noise of our very busy schools. Consider establishing a single SST coordinator who receives all of the referrals.

The referrals should be made on a standard form. This form should collect important information (current and prior achievement, health and discipline issues, attendance, etc.) but not overly burden the person making the referral (Rosenfield & Gravois, 1996). This is a tricky balance. The referral form should contain just the right amount of summary information so that the team does not have to wade through the entirety of a student's cumulative record at the time of the SST, but the form should not be so detailed as to discourage referrals. Training on the use of the form and school or district data collection policies will facilitate the referral process. Forms should be revised if it regularly takes people over 30 minutes to complete.

When examining the referral process, you may wish to consider whether all students have equal access to the SST. The SST, as conceptualized in this model, is a general education activity. As such, all students, including those who are very young (i.e., kindergarten), those who have disabilities, and those who are English language learners should be eligible to benefit from a SST if they are experiencing school failure. School personnel who view the SST as the "gateway" to special education may have been informed that very young children or English language learners are inappropriate referrals to special education and so they may not refer students with these characteristics to the SST. When introducing the referral process to your staff, it may be necessary to dispel some of these misconceptions and encourage the staff to refer all students who are experiencing persistent failure to the SST.

Table 2
SST Self-Study Guide Checklist

Directions: Review each of the following problem solving SST components with your SST members. Identify whether each component is in place consistently ("yes") or occasionally in place ("sometimes") or not in place at all ("no"). Identify which components are a priority for your team to focus on implementing, improving, or sustaining.

Organization and Management:

Making a Referral
- SST coordinator identified
- Teachers know how to sign-up/ make referral
- Teachers know how to complete referral paper work
- Referral paper work takes less than 30 minutes to complete
- Equal access: ELL and very young student (kindergarten) and students with disabilities are referred to the SST

Pace and Focus of the Meeting
- Agenda is visible to all participants (and translated when necessary)
- Time keeper signals end and beginning of problem-solving stages
- Meeting space is adequate
- Avoid admiring the problem
- Focus on a single student at one time

Scheduling
- SST scheduled or other assistance offered within one month
- Established time and place for meeting
- SSTs are held frequently enough to meet the demands of the student population: prior to referral to special education, grade retention; and/or major disciplinary action
- Follow-up meeting scheduled at initial SST meeting

Dissemination of the Results
- Note-taker identified
- Results of the meeting are recorded on forms
- Results are disseminated within two days to all SST participants
- Results are translated for the parents as needed

Length of the Meeting
- At least 25 minutes devoted to discussing one student
- No more than 45 minutes spent on an individual student
- Comments:

continued on following page

Table 2
Problem Solving Steps, continued

Essential People Present
- Referring teacher is present
- For students with more than one teacher, the other teachers are either present or there is a method to collect their input and inform them on the intervention plan
- Parent invited
- Parent prepared by school staff member for the meeting
- Parent is present
- General education teacher(s) act as consultants
- Counselor and/or psychologist is present
- Administrator is present
- Translator and/or ELL specialist is present when appropriate
- Other _____

Collaborative Process
- Coordinated interdependence — members freely share ideas and resources
- Shared vision — focus on intervention rather than disability
- Make necessary requests for clarification
- Use paraphrasing
- Engage in perception checking
- Comments:

Problem-Solving
- Problem identification
- Prioritize concerns
- Consider multiple data sources: interview, observation, student work, etc.
- Define the problem in specific, observable terms
- Identify baseline
- Discuss conditions in which behavior occurs
- Identify intervention goal

Plan Implementation
- Consultant assigned to assist teacher in implementing classroom-based interventions
- Plan implemented and modified as needed
- On-going progress monitoring data are collected (at least once per week)
- Data charted/visually displayed

Problem Analysis
- Generate hypothesis: The problem behavior occurs because of _____
- Consider contributing factors such as the curriculum, instruction, school/classroom environment, home/community, peers, and child characteristics
- Develop intervention plan
- Identify on-going progress monitoring system, including who will collect the data and how often
- Comments:

Plan Evaluation
- Hold follow-up meeting (6-8 weeks after the initial SST)
- At follow-up meeting, discuss implementation of each intervention (e.g., Did it occur as planned? What was the outcome?)
- Examine progress monitoring data
- Based on treatment fidelity and progress monitoring data make a decision: continue intervention, modify intervention, refer to special education, etc.
- Closure on each student is achieved
- Re-schedule another SST meeting as necessary

Scheduling meetings. The SST coordinator typically schedules each referral as they occur. It is critical that these people not act as gate-keepers. For example, some SST coordinators may refuse some requests because he/she does not think that the referred student's needs are dire enough. Gate-keepers who refuse requests for SST assistance may be working under the assumption that only students who are experiencing significant academic or behavioral delays, which could possibly qualify them for special education, should be referred.This gate-keeping is very bad for morale and contradicts two very important premises of the SST: early interventions are more effective than those that are attempted later (Rhode, Jenson, & Reavis, 1992), and the primary purpose of the SST is to develop and implement interventions, not to determine whether to test a student for special education (Graden, 1989).

The person who schedules the SST may need to prioritize some of the referrals. If a crisis emerges, one student's SST may be postponed for another, or an impromptu SST may be held. Similarly, if a teacher is referring a lot of students or frequently refers students for very minor difficulties, than a member of the SST may wish to work individually with that teacher to identify class-wide interventions rather than holding SST meetings for each student.

Meeting individually with teachers may be particularly important for a school that is struggling to hold enough SST meetings to meet the needs of the student population. For example, the author recently consulted with a year-round, multi-track elementary school that serves 1600 students. Simply scheduling initial and follow-up meetings for students with very serious academic and/or behavioral difficulties was problematic. Teachers became frustrated by the lengthy waiting list, often waiting 3 or 4 months for a SST meeting to be held for their student. The multi-track schedule further complicated implementation of interventions, provision of consultation during the intervention, and planning of follow-up meetings because it seemed that invariably a key person would be "off-track" at any given time. One possible solution was to develop multiple building-wide Student Study Teams – each one associated with one or two tracks. A second possible solution was to have grade level meetings staff two or three students every other week. When each grade level (K-5) meets twice a month to plan interventions for 2 or 3 students, 24 to 36 students per month can be addressed, many more than a building-level student support team could possibly handle in the same time period (Sprick, 1999). A third solution to consider is to assign a consultant to each time-slot on the SST schedule. The consultant meets with the teacher when a referral is made, even though the SST meeting may not be held for 2 or 3 months hence. A school that implemented this strategy found that the consultant helped the referring teacher to define the problem, collect baseline data and begin some interventions prior to the SST meeting. As a result, some teachers no longer needed to meet with the SST, and others were much more prepared for the meeting. The important thing to consider is that a teacher or parent should not wait weeks or months for assistance.

A final important scheduling consideration is calendaring a follow-up date. A 6-to-8 week follow-up is a key component of problem solving. Scheduling the follow-up at the initial meeting makes it more likely that all of the key participants will attend. For schools that follow a traditional school-year calendar, it is not unusual for the SST to be fully "booked" from April until the end of the year with regularly scheduled follow-ups (particularly given the disruptions caused by the lengthy state testing schedule in California). Some teachers may be frustrated that they cannot refer a new student to the SST in the spring. However, the end of the year is not the best time to refer a student to the SST because there is little time to implement and monitor an intervention. Informing the staff that fall and winter are the best times to make a referral, rather than waiting until the end of the year, may be helpful.

Length of the meeting. The length of the SST meeting will obviously affect scheduling opportunities and the number of students that a site is

able to serve. The suggested length for a SST meeting is between 25 and 35 minutes. Obviously, more lengthy meetings are appropriate when the discourse is being translated for non-English speaking parents. It is very difficult, perhaps impossible, to fully engage in collaborative problem solving when less than 25 minutes are devoted to a single student. While meetings that are too short rarely result in individually tailored interventions, SST meetings that last more than an hour are also problematic. Lengthy discussions may result in SST members becoming over-committed to the intervention plan (Sprick, 1999). The team may believe the extended time and effort they devoted to developing a plan has necessarily resulted in the *optimal* plan, and if that plan fails, team members may be unlikely to revise or try another plan. This is incongruent with two major assumption of problem solving: (a) there is absolutely no way to know whether an intervention will work except to try it, and (b) intervention strategies should be revised if they are not working (Shapiro, 1996). Thus, over-commitment to a single plan can thwart the problem-solving process.

Pace and focus of the meeting. Problem solving should be the focus of the SST meeting. The first step in problem solving is problem identification, which emphasizes factors that the SST can influence. This approach is very different than and stands in contrast to "admiring" the problem. "Admiring" the problem may include a lengthy discussion about historic events the SST members have absolutely no influence over (e.g., a mother's past substance abuse, a father's prior incarceration). It is important to understand past events only for predicting future student behaviors, not to reinforce the myth that the student difficulties are immutable due to historic events. Similarly, admiring the problem may take the form of discussing the student's brother, cousin, or even a completely unrelated students who shares similar attributes. This line of inquiry may be helpful in identifying interventions that have proven successful with similar problems but is very ineffective if the discussion becomes focused on which student presented with the most outrageous difficulties. An agenda with time limits can help to avoid derailing effective problem solving with problem admiration. A timer and/or time keeper that signals the end of one problem solving stage and the beginning of another can help maintain a focused and efficient meeting.

Dissemination of the results. Recording and disseminating the intervention plan, including who will do what, when, where, and how, increases the likelihood that those events will occur (Rosenfield & Gravois, 1996). In addition, beginning the progress-monitoring chart for the person or persons responsible for collecting the data may increase the likelihood that the data will be collected. Providing everyone who is involved in the intervention with the intervention goal, plan, and monitoring system not only increases fidelity of treatment and progress monitoring, it seems likely to assist in creating a focused vision of change among the adults in a child's life. A member of the SST should be assigned to be the note-taker and someone (possibly clerical staff) is assigned responsibility for copying and disseminating the intervention plan within 1 or 2 days of the meeting. For English language learners, it is very important (an in some cases a legal requirement) to have the intervention plan translated into the parent's native language.

Teamwork

Teamwork, including engaging the essential people in a collaborative process guided by a common vision, is critical to a successful SST. Some strategies for promoting collaboration are described next, though a detailed description of effective collaboration skills is beyond the scope of this paper. Readers are referred to Kampwirth (1999) or Rosenfield and Gravois (1996) for more information on collaborative consultation.

Essential people. The SST membership often indicates the purpose of the SST meeting and guides the types of interventions that will be considered. For example, SSTs that consists exclusively of special educators, speech and language therapists, and school psychologists suggest that the focus of the meeting is determining special

education eligibility rather than developing interventions (Rosenfield & Gravois, 1996). Conversely, SSTs that includes general education teachers (acting as consultants), administrators, parents, general education specialists, etc. suggest that interventions in the context of the general education program are a top priority. In the district undergoing SST reform, the inclusion of general education teachers who act as consultants has increased the team's focus on general education interventions. Furthermore, many psychologists in this district have reported that general education teachers have excellent intervention ideas and their suggestions often carry greater credibility than those posed by psychologists and counselors. As one teacher stated, "the (consulting) teacher also has 35 students in her class, so if it worked for her, it should work for me."

Parents are also essential partners in diagnosing and intervening in student problems (Christenson, 1995), and their participation when issues of special education are considered is required by law (U.S. Congress, 1997). In the district initiating these SST changes, parental participation dramatically increased when the classroom teacher, rather than the counselor or psychologist, invited and prepared the parent for the SST meeting instead of the school counselor. An interpreter and an English language learner specialist should be present at SST meetings that address students who are English language learners.

Collaborative process. Successful collaboration depends in part upon coordinated interdependence where each member gives and takes from others equally and freely and there is no perceived hierarchy of power among the various members (Caplan & Caplan, 1993). Such coordinated interdependence should result in a synergism, wherein the results of the collaborative process are greater than if each SST member worked on the problem in isolation. When some members of the team dominate others by either attempting to initiate or withhold a referral to special education services, coordinated interdependence and the resulting synergism is unlikely. A myopic focus on special education eligibility, rather than problem solving, can impede the collaborative process. Furthermore, when special education is the goal, the focus of the meeting is on what disables rather than enables the student (Grimes, 1999).

Two strategies for "converting" those who have a traditional refer-test-place perspective to the problem-solving perspective are: (a) to provide additional intervention and monitoring resources (often modeling and rehearsing these behaviors for the teacher or parent), and (b) to stress that the intervention is part of an assessment procedure that may begin a full special education evaluation. Intervention-based assessment is a key component of problem solving. Unlike traditional assessment methods, the primary purpose of problem solving is to determine appropriate interventions (Tilly, Reschly, & Grimes, 1999).

Problem-Solving

There are some variations among problem solving models. For example some problem solving models begin with "establishing a cooperative partnership" (Zins & Erchul, 1995) as addressed in the preceding section on teamwork, while others initiate problem solving with "problem identification." Yet, all problem-solving models share a foundation in behavioral consultation (Telzrow, McNamara, & Hollinger, 2000). The problem solving process generally occurs in four general stages: problem identification, problem analysis, plan implementation, and plan evaluation (Kratochwill, Elliott, & Rotto, 1995).

A recent study by Telzrow et al. (2000) suggests that problem-solving activities are critical to the effectiveness of school based intervention teams. Two problem-solving components, clearly identified intervention goals and collecting data that indicate student response to interventions, were found to be significantly correlated with student outcomes. While there is ample empirical support in the behavioral consultation research for each of the four stages of problem solving, SSTs generally have not mastered each of these activities equally. For example, the teams examined by Telzrow et al. (2000) were relatively proficient at developing behavioral definitions of the problems,

and identifying a precise intervention goal; however, they had difficulty hypothesizing reasons for the problem, collecting evidence of treatment integrity, and comparing student performance to baseline. Similarly, Bahr and colleagues (1999) found problem-solving intervention teams to be the least familiar and least likely to use important data collection and analysis methods, such as graphing intervention results, comparing post intervention data to the baseline, and conducting empirical classroom observations. These findings suggest that SST members may be more competent at conducting the first problem solving stage (problem identification) and they require more intense training on subsequent stages (e.g., problem analysis, plan implementation, and plan evaluation.) Accordingly, some suggestions for promoting these latter crucial components of problem solving are provided next.

Problem identification. The first stage of problem solving, problem identification, begins with prioritizing among many different concerns to identify one or two target behaviors (Rosenfield & Gravois, 1996). The target behavior is described in terms of frequency, duration, intensity or latency and the conditions under which it occurs (Salvia & Ysseldyke, 1997). Often the teacher or parent may not have a precise definition of the target behavior until after the initial SST meeting, and a data collection procedure for establishing baseline is put into place after the first meeting. A good method for determining whether a target behavior has been defined in specific, observable terms is to ask the question "Can it be graphed?" For example, lack of student motivation cannot be charted, but the number of math problems a student completes during a 20-minute interval each morning or the latency between a teacher's request to begin an assignment and the student's response can be graphed. For both academic and behavioral concerns, target behaviors that represent an increase in a desired replacement behavior are preferable to those that aim to decrease in the undesired behavior (Rhode, Jenson, & Reavis, 1992; Shapiro, 1996). Once the target behavior is established, an intervention goal based on the acceptable level of performance is identified.

Problem analysis. During this stage, the team generates hypotheses to explain the discrepancy between the student's current performance and the intervention goal. The discussion may focus on whether the student is experiencing a skill or a performance deficit, whether the student has had the opportunity to learn the target skill, and identifying conditions in which the student experiences more and less success (Dally, Witt, Martens, & Dool, 1997). Telzrow (1995) suggests generating hypotheses about such contributing factors as the curriculum, instruction, school/classroom environment, peers, home/community and child characteristics on the student's current performance. If a number of equally plausible hypotheses are generated, the SST may need to reconvene the meeting in order to collect more data.

Finally, an intervention plan is established based on these hypotheses. Many SSTs brainstorm intervention ideas and then select a few to implement based on their perceived effectiveness and feasibility. Very specific plans are more likely to be followed (Rosenfield & Gravois, 1996). Some guiding questions posed by Telzrow (1995) for ensuring that this stage of problem solving is successful are: (a) Did we identify an intervention, or a place where interventions occur? (b) Will the intervention address the cause of the problem? (c) How will each of the specific interventions be implemented? and (d) What data will be collected to evaluate the effectiveness of these interventions? The last question is a critical issue to problem solving, yet many teams struggle with collecting ongoing progress monitoring data (Bahr et al., 1999; Telzrow et al., 2000). Two strategies for reducing teachers' resistance to data collection areto use (a) data that are already being collected routinely, and (b) self-monitoring data that the student collects.

Plan implementation. The third problem solving stage includes implementing the plan and collecting and charting progress-monitoring data. Assigning a consultant to follow-up with the

teacher was found to increase the fidelity of the intervention implementation in the pilot study. The consultant can model and rehearse the intervention strategies with the teacher or assist the teacher in negotiating unforeseen obstacles to intervention implementation, which may reduce the likelihood that a teacher ends an intervention prematurely (Rosenfield & Gravois, 1996). Similarly, the consultant can assist the teacher in examining the progress monitoring data and determining whether a midcourse adjustment in the intervention is warranted.

Plan evaluation. The final stage of problem solving is to reconvene the SST to evaluate the intervention plan's effectiveness. During this follow-up meeting, the team reviews each intervention to determine and document whether they occurred and whether any modifications had been made. Documenting what worked and what didn't work is very useful for future attempts to develop intervention plans (Rosenfield & Gravois, 1996). Secondly, the team reviews the progress monitoring data, which should include a graphic display of multiple data points collected over time. Based on the fidelity of implementing the intervention plan, the student's progress, and the discrepancy between the student's current performance and the intervention goal, the team selects from one or more of the following options: (a) discontinue the interventions, (b) continue the interventions, (c) modify the interventions, (d) refer to special education, (e) retain at grade level, or (f) refer to alternate placement. Selecting from one of these six options establishes closure on the problem solving process. Rather than letting the problem-solving process fade away, achieving formal closure is critical to ensuring accountability for student outcomes (Rosenfield & Gravois, 1996).

IMPLICATIONS FOR SCHOOL PSYCHOLOGICAL SERVICES

Confronted with large caseloads and increasing demands to test students for special education eligibility due to the current zeitgeist of standards-based education reform, some psychologists have abandoned best practices. For example, Pam Beeman (2000), a California school psychologist wrote:

> California has announced new standards for grade promotion, and this has, you can imagine, engendered a dramatic rise in request for assessment. . . If a student is getting F's, we test them. If a parent requests it, we test them. If an agency or a doctor or a therapist requests it, we test them... If group achievement test percentiles are low, we test 'em... I don't have time to be proactive when I'm so busy being reactive. Pre-referral interventions? What are those? (p. 35)

Since problem solving decreases special education referral rates (Fuchs, Fuchs, & Bahr, 1990; Ysseldyke & Marston, 1999) and subsequently the demand to test, one wonders why school psychologists continue to engage in this refer-test-place medical model. Three possible explanations exit: (a) school psychologists actually believe that the current categorical model serves students well; (b) they lack problem-solving skills, including competencies in conducting curriculum-based assessments, providing intervention support, and behavioral consultation; or (c) they are fettered by district policies and state law to a traditional medical model for conceptualizing and providing special education services. Leadership from school psychological organizations, training programs, local educational agencies, and the state department of education is necessary to innovate current school psychology practices. An example of such innovation would be to pilot non-categorical models of special education in California. Non-categorical models that use problem solving to determine special education eligibility are gaining national support (Reschly & Tilly, 1999).

CONCLUSION

While the results of implementing a problem solving SST described in this paper only represent one school for one year, they are encouraging. The self-study guide contained in the appendix is currently being used to evaluate implemen-

tation of problem solving SSTs in each of the 20 pilot schools. We expect to find variability in implementation among the sites, which will help to develop multiple models of problem solving SSTs to choose from as we proceed to a district-wide implementation. Flexibility in implementing and sustaining problem solving SSTs is necessary because it requires organizational change that involves multiple participants. However, the essential elements of problem solving, including precisely defined problems, on-going progress monitoring, and conceptualizing problems from an ecological rather than medical model, must remain in order to have truly effective SSTs. The benefits of problem solving SSTs are, at a minimum, twofold: (a) student's needs are met in the least restrictive environment and (b) psychologists have more time to devote to consultation, counseling and other interventions. Problem solving remains best practice for developing, implementing and evaluating interventions and, in this author's opinion, the most promising alternative to the current categorical system for identifying and servicing students with disabilities.

REFERENCES

Bahr, M. W., Whitten, E., Dieker, L., Kocarek, C. E., & Manson, D. (1999). A comparison of school-based intervention teams: Implications for educational and legal reform. *Exceptional Children, 66*, 67-83.

Beeman, P. (2000). I love my WISC-III. *Communiqué, 28* (7), 31.

California Department of Education. (December, 2000). Degree of disproportion of placement by ethnicity by disability category. *Making changes to achieve positive results for California's children.* [Online]. Available: www.cde.ca.gov/spbranch/sed/qapnow.htm#key

Caplan, G., & Caplan, R. B. (1993). *Mental health consultation and collaboration.* San Fransico, CA: Jossey-Bass Inc.

Christenson, S. (1995). Best practices in supporting home-school collaboration. In A. Thomas & J. H. Grimes (Eds.), *Best Practices in School Psychology* (3rd ed.: pp. 253-267). Bethesda, MD: National Association of School Psychologists.

Dally, E. J., Witt, J. C., Martens, B. K., & Dool, E. J. (1997). A model for conducting a functional analysis of academic performance problems. *School Psychology Review, 26*, 554-574.

Fuchs, D., Fuchs, L. S., & Bahr, M. W. (1990). Mainstream assistance teams: A scientific basis for the art of consultation. *Exceptional Children, 57*, 128-139.

Graden, L. L. (1989). Redefining "prereferral" intervention as intervention assistance: Collaboration between general and special education. *Exceptional Children, 56*, 227-231.

Graden, J. L., Casey, A., & Christenson, S. L. (1985). Implementing a pre-referral intervention system: Part I. The model. *Exceptional Children, 51*, 377-384.

Grimes, J. (1999, April). *Diagnosing what matters most: The learning enabled.* Paper presented at the meeting of the National Association of School Psychologists, Las Vegas, NV.

Kampwirth, T. (1999). *Collaborative consultation in the schools.* Saddleriver NJ: Prentice Hall.

Kovaleski, J. F., Gickling, E. E., Morrow, H., & Swank, P. R. (1999). High versus low implementation of instructional support teams. *Remedial and Special Education, 20*, 170-183.

Kovaleski, J. F., Tucker, J. A., Stevens, L. A. (1996). Bridging special and regular education: The Pennsylvania initiative. *Educational Leadership, 53*, 44-47.

Kratochwill, T. R., Elliott, S., & Rotto, P. C. (1995). In A. Thomas & J. H. Grimes (Eds.) *Best Practices in School Psychology* (3rd ed.: pp. 519-537). Bethesda, MD: National Association of School Psychologists.

Reschly, D., & Tilly, W. D. (1999). Reform trends and system design alternatives. In D. J. Reschly, W. D. Tilly, & J. P. Grimes (Eds.), *Special education in transition: Functional assessment and noncategorical programming.* Longmont, CO: Sopris West.

Rhode, G., Jenson, W. R., & Reavis, H. K. (1992). *The tough kid book: Practical classroom management strategies.* Longmont, CO: Sopris West.

Rosenfield, S. A., & Gravois, T. A. (1996). *Instructional consultation teams.* New York: Guilford Press.

Salvia, J., & Ysseldyke, J. (1997). *Assessment* (7th ed.). Boston, MA: Houghton Mifflin.

Shapiro, E.S. (1996). *Academic skills problems: Direct assessment and intervention,* (2nd ed.). New York: Guilford Press.

Sheridan, S. M., & Gutkin, T. B. (2000). The ecology of school psychology: Examining and changing our paradigm for the 21st Century. *School Psychology Review, 29*, 485-502.

Sprick, R. (1999). *The 25-minute planning process: A video program for teacher-to-teacher problem-solving.* Longmont, CO: Sopris West.

Telzrow, C. F. (1995). Facilitating intervention adherence. In A. Thomas & J. H. Grimes (Eds.), *Best practices in school psychology* (3rd ed.: pp 609-623). Bethesda, MD: National Association of School Psychologists.

Telzrow, C. F., McNamara, K., & Hollinger, C. L. (2000). Fidelity of problem-solving implementation and relationship to student performance. *School Psychology Review, 29*, 443-461.

Tilly, W. D., Reschly, D. J., & Grimes, J. P. (Eds.). (1999). Disability determination in problem solving systems: Conceptual foundations and critical components. In D. J. Reschly, W. D. Tilly, & J. P. Grimes (Eds.), *Special education in transition: Functional assessment and noncategorical programming* (pp. 285-291). Longmont, CO: Sopris West.

U.S. Congress. (1997). *Individuals with Disabilities Education Act Amendments of 1997.* Washington, DC: Author.

Will, M. C. (1986) Educating children with learning problems: A shared responsibility. *Exceptional Children, 52*, 411-416.

Ysseldyke, J., & Marston, D. (1999). Origins of categorical special education services in schools and a rationale for changing them. In D. J. Reschly, W. D. Tilly, & J. P. Grimes (Eds.), *Special education in transition: Functional assessment and noncategorical programming* (pp. 1-18). Longmont, CO: Sopris West.

Zins, J. E., & Erchul, W. P. (1995). School consultation. In A. Thomas & J. H. Grimes (Eds.), *Best practices in school psychology* (3rd ed.: pp 609-623). Bethesda, MD: National Association of School Psychologists.

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An Introduction to Cultural Issues Relevant to Assessment with Native American Youth

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A review of issues surrounding the assessment of Native American youth is presented to inform and guide school psychologists. A description of schooling experiences of many Native American students is included along with examples of Native American cultural factors that may conflict with European-American values often infused in school systems. Expected behaviors of a service provider necessary to gain trust with Native Americans are outlined. The necessity of using measures to ascertain language barriers and acculturation level is discussed and examples provided. The validity of social-emotional and cognitive tests for Native American students is examined with relation to their standardization with a non-Native American population. A recommended evaluation procedure concludes with a broadly defined process designed to clarify steps towards a culturally competent assessment.

Providing services for Native American youth and their families is complicated by their unique cultural history and extreme within group diversity. Though Native Americans represent 558 different tribes and 252 different languages (Garrett, 1999), they are often treated according to one stereotypic viewpoint. In fact, various tribal languages can differ linguistically as much as English and Japanese languages differ from each other (Allen, 1998). This cultural and linguistic diversity between various Native American tribes is perhaps one of the most important factors to consider when working with these youth. However, a shared history of genocide and a common worldview based on a fluid self-concept and obligation to the community unites tribes to some extent. Understanding some of these shared traditions, the role of service providers in Native American culture, and the appropriate use of assessment is necessary for the successful assessment and resulting intervention with these youth.

SERIOUS PROBLEMS FACING THE NATIVE AMERICAN POPULATION

Native Americans have a history of conflict with European Americans. For years they have been relocated away from their homelands, segregated, and separated from their children. In this way, family traditions and language have been lost, resulting in unresolved loneliness, grief, and anger. Thus, most tribes have experienced high rates of poverty, ill health, poor education and unemployment (Dana, 1993).

Some of the statistics associated with the Native American population highlight areas of concern for school psychologists and other mental health service providers. The population of Native Americans in the United States is currently around 2 million, double what it was in the 1970s, but much less than past estimates of 10 million (LaFromboise & Low, 1998). The average age of the Native American population as a whole is very young, with estimates ranging from 17.3 years (Garrett, 1999) to 22.6 years (LaFromboise & Low, 1998) and more than 500,000 Native Americans across the nation under the age of 15. Estimates of life expectancy range from 47.5 years (Garrett, 1999) to 71.5 years (LaFromboise & Low, 1998), much lower than estimates of the United States population in general. Half of this population lives

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in major urban areas, while the other half lives either in rural regions or on or near reservations, with 28% of the total population living below the poverty line (Allen, 1998). Native American alcoholism mortality is 6.3 times higher than other groups. Reflective of the short life expectancy, other illness and health problems occur at higher rates than other U.S. population groups: cirrhosis of the liver 3.5 times higher, homicide rate 1.5 times higher, and suicide 1.4 times higher. Their overall mortality rate is 2.6 times higher. The unemployment rate for Native Americans was cited by LaFromboise and Low (1998) to be 14.4% in general and 45.6% on reservations, as compared to 6.3% for the general United States population at that time. In addition, Native American income was cited to be 50% below that of European-Americans. Native Americans also attain fewer years of education than the average American, with lags in academic performance reaching one to two years in elementary school and two to four years in secondary school. This has contributed to a 36% to 51% dropout rate, with 40% of Native Americans having less than a high school education, 35% having completed high school, and 21% having some college experience (LaFromboise & Low, 1998).

CULTURAL CONSIDERATIONS

These statistics are considered to reflect the outcomes of cultural subjugation rather than resulting from inherited traits unique to Native Americans (Davidson, 1992). School psychologists should be aware that the entire framework of assessment of educational difficulties derives from a European American social perspective and thus, must be carefully evaluated for its application to Native American peoples. An understanding of some cultural differences between Native Americans and European Americans will form a basic understanding of issues necessary to address in the assessment of academic and social-emotional needs.

Dana (1993) describes several broad characteristics of Native American cultures. Though the following generalities do not apply to all Native American peoples, they provide some guidelines from which to approach assessment with Native American youth. First, the concept of family in the Native American culture refers to the village community as a whole with responsibility for food, shelter, transportation and childcare shared equally by its members. In addition, many Native American tribes place importance in focusing on the present, believing human nature to have both good and evil qualities, and a being or doing activity orientation. Finally, spirituality is an integrated component of the self and includes all living beings, with the spirit world accessible through meditation and ceremony. Thus, wellness is obtained through harmony in mind, body and spirit.

LaFromboise and Low (1998) describe specific practices common to many Native American tribes that differ significantly from European American practices and may cause misunderstanding by teachers and social service professionals. Many Native Americans regard their children as beloved gifts, and honor their development throughout various stages of development such as learning to walk without pressure to perform at a certain age. It is generally believed that children will progress through various stages when they are ready. Autonomy is highly valued, and thus, children are allowed the freedom to experience the natural consequences of their behavior. Because of this, children who misbehave may not be reprimanded. These practices may be seen as neglectful by school professionals who do not understand Native American cultural practices.

Various Native American tribes may also have different communication patterns from each other and mainstream American culture (LaFromboise & Low, 1998). Many tribes have very distinct rules for communication. In some tribes, a hierarchy of communication is in place, with information passed from grandparent to parent to child. Thus, a relative who notices a child misbehaving will have a talk with the mother, who will then discipline the child. In this way, all generations have input into child rearing but the parent takes the

responsibility to privately teach behavioral lessons. This may lead to confusion and shame for a Native American student when reprimanded in front of classmates by a teacher.

Spiritual practices of Native Americans also differ significantly from those of European Americans (LaFromboise & Low, 1998). Children are introduced to spiritual ideals and practices at an early age. They are taught a reverence for nature as well as for independence and self-discipline. Families expect their children to participate in tribal ceremonies regardless of conflicts with school hours. This is especially difficult for those children attending school far away from reservations where the ceremonies may take place. In addition, the mainstream culture's expectations for academic success through competition and scholarship are counter to most Native American tribes' values. As an example, LaFromboise and Low (1998) state the conflict university students experience when they receive financial stipends for tuition and living expenses and feel the obligation to share. Native American students may additionally receive conflicting messages about their academic success from their families who are likely to discourage any move that takes them away from the immediate family and local community.

THE EDUCATIONAL EXPERIENCE OF THE NATIVE AMERICAN CHILD

In a study of the wellness of Native American students, Garrett (1999) describes the schooling experience of Native American youth. He states that many Native American children start schooling highly motivated. Native American youths perform as well or better than other students up until the fourth grade level, when their performance begins to decline rapidly. Many hypotheses have been offered to explain this phenomenon such as discrimination, cultural irrelevance of curriculum, and lack of family support.

Garrett (1999) reviews the results of various studies to explore specific reasons for this performance decline. For example, Native American high school students have cited lack of quality student-teacher relationships, irrelevant school curriculum content, and lack of parental support as reasons for dropping out of school. Additional reasons from an amalgamation of studies include the need to work, distance from school, reading problems, boredom, retention due to absenteeism, pregnancy, substance abuse, family demands, disciplinary problems, academic failure, being older than other students, language problems, and medical complications. Native American children's values of group harmony, cooperation, and sharing conflict with the European American emphasis on individuality, competition, and achievement. Programs designed to increase the self-concept of children by praising oneself, increasing student popularity, and encouraging self-pride tend to fail with Native American youth, as these interventions are not in congruence with their cultural beliefs. By fifth or sixth grade, Native American youth may grow sullen, resistant, and indolent as they struggle to bridge the gap between their cultural ideals and the teachings of the majority culture (Garrett, 1999).

Garrett (1999) attributes these problems with cultural identity to experiencing difficulty in establishing a self-concept at this critical period in an early adolescent's life. In order to succeed in the educational system, Native American youth must be able to become biculturally competent, an exceptionally difficult process for a minority group with such a history of abuse associated with European American culture and vastly different cultural beliefs. In order to establish a healthy cultural identity, these youth must be able to adapt modes of social behavior to context and satisfy their need for belonging, mastery, independence, and generosity (Garrett, 1999). To promote this "wellness," benefits of interventions such as self-awareness exercises, values clarification, stress management, and communication skills may need to be considered when determining goals based on assessment results (Garrett, 1999). During assessment, it is important to evaluate students' levels of personal cultural identity in order to properly assess and design intervention plans.

SCHOOL PSYCHOLOGIST COMPETENCIES

Understanding the expected role and behavior of a service provider is necessary in order to promote family and child comfort with the assessment process. With only 0.4% of school psychologists nationally and 0.9% of school psychologists in California being Native American (Thomas, 1999), there are relatively few who genuinely understand the culture. This problem highlights the need for cultural competence among those school psychologists who work with Native Americans.

Dana (1993, 2000) describes necessary components of cultural competence for service providers. In a broad sense, this entails a cultural self-assessment, valuing diversity, considering ways of adapting existing services and programs to meet diverse needs, and institutionalizing cultural knowledge. Specifically, school psychologists must examine their own biases regarding Native American families, recognize that each child has a unique mix of cultural experiences and educational needs, investigate how each student's needs can be met in the school, and promote an understanding of cultural influences affecting Native American children through education of teachers and administrators.

In working with individual families, Dana (2000) describes a three-step process that is necessary to gain respect. First, "common basing" is necessary during which a mutual sharing of experiences, local politics, and mutual friends occurs. This might necessitate meeting outside a formal school setting, and getting personally involved with the client. Then, identifying the cultural experience of the problem, suggesting goals for resolution, generating an intervention plan, and evaluating its effect can occur. Finally, it is necessary to assure parent and child that additional contact can be had at any time whenever needed. Intervention plans must be relevant to cultural experiences and based on assessment materials interpreted with an individual's cultural experience in mind.

THE ASSESSMENT PROCESS

There are several assessment issues particular to Native American youth that must also be considered. First, various behaviors may negatively affect assessment outcome and must be accounted for in giving any assessment test. These include, "nonassertive, nonspontaneous, and self-spoken verbal interaction; limited eye contact; discomfort and decreased performance on timed tasks; reluctance to offer self-disclosures; and selective performance of only those skills that contribute to the betterment of the group" (LaFromboise & Low, 1998, p. 122). In addition, linguistic differences in intonation and subtle nonverbal cues may affect test performance on subtests of standardized intelligence tasks (Allen, 1998). These behaviors may be moderated by the perceived trustworthiness of the service provider as described above and must be taken into consideration when evaluating the results of an assessment.

A challenge to assessing Native American youth is determining their level of cultural identity. It is important to note that cultural identity is not synonymous with acculturation (Walters, 1999). While acculturation is the level to which a person has adopted dominant cultural norms over native customs, cultural identity reflects the idea that a person can adopt some practices of the dominant culture while retaining their own native cultural values (Walters, 1999). Cultural identity is an important factor to consider as a child's functioning within the dominant culture will depend on the ability to adapt to majority culture practices while retaining competence and pride in traditional cultural practices (Allen, 1998). The *Northern Plains Bicultural Immersion (NPBI) Scale* assesses a youth's Native American and European American cultural practices including social activities, religious practices, healing practices, clothing preference, language, and comfort with people of the two ethnicities (Allen, 1998). Results will give a service provider an idea of how well a child is able to function in two cultures while retaining identity and pride in the traditional culture.

Standardized assessments assume a fluency in English as well as significant exposure to American culture (LaFromboise & Low, 1998). Though often considered native English speakers, Native American children generally grow up speaking an indigenous language or "Indian English" dialect and enter school with limited English proficiency (Crawford, 1995). Tests of social and emotional functioning as well as cognitive ability must, therefore, be used with discretion and results interpreted with caution. Thus, it is important to review studies examining the relevance of specific assessment materials to the Native American population.

Studies evaluating the results of the Center for Epidemiological Studies Depression (CES-D) scale have found depression to have a different factor structure for Native American adolescents than European American adolescents (Allen, 1998). This indicates that depression may not be a construct directly generalizable to the Native American population, and that a more appropriate measure must be developed to tap Native American feelings of mood swings, low self-esteem, worry, and anger. In studying Hopi experiences of these emotions, an *American Indian Depression Schedule-Hopi Version* (AIDS) was developed in order to bridge the gap between Western and Native American constructs of depression (Allen, 1998). This measure is considered more appropriate to use with Native American populations than other, more traditional measures of depression. Knowledge and use of such measures will greatly enhance the quality of assessment when such an issue of emotional disturbance is under question.

In a study examining differences in Weschler Intelligence Scale for Children results between European Canadian and Native Canadian males and females referred for psychoeducational assessment, several significant differences were found between groups (Dolan, 1999). First, results indicate that teachers more readily referred European Canadian males for services than they did Native Canadian or female youth. This suggests that symptoms indicating need were more subtle for Native Canadian youth and European Canadian females, or that teachers had lower expectations about the possibility of success for these populations. In addition, significant differences were found between European Canadians and Native Canadians on Verbal, Performance, and Full scale IQ scores. IQ scores were significantly lower for Native Canadian youth than European Canadians. However, only those Native Canadians with borderline scores were referred for evaluation. These results highlight several questions about the appropriate identification of youth needing services. Further research is necessary in order to determine whether referral bias leads to only the lowest Native Canadians being tested, thus explaining the differences in IQ scores. It is also possible that these tests underestimate Native Canadian abilities because of cultural bias (Dolan, 1999).

Davidson (1992) evaluated the cognitive abilities of Native American youth compared to European American youth using Luria's *Information Processing Model*. Because previous research had indicated mixed support for the view that Native Americans tend towards holistic processing strengths while European Americans show strengths in sequential processing, Davidson (1992) used the *Kaufman Assessment Battery for Children* (K-ABC) to test this theory. By administering the K-ABC to Native American and European American youth referred for inclusion in an enrichment program, it was found that there were no differences in overall intellectual ability. However, significant differences were found in processing strengths with Native Americans scoring higher on Simultaneous Processing subtests than European Americans, and European Americans scoring higher on Sequential Processing subtests than Native Americans. Though individual differences within each group require careful application of these findings to other students, results suggest that Native Americans may have different cognitive strengths than European Americans. This may be important to consider when determining academic interventions that will tap into a student's strengths.

RECOMMENDED EVALUATION PROCEDURE

Using an evaluation procedure tailored to the Native American population can help promote a culturally competent assessment. The following is a list of recommended assessment procedures.

1. Assessor competence. The assessor must be competent to select and use appropriate assessment tools as well as establish rapport with the family. Not only must the assessor be able to use standardized tests, but be trained to evaluate their utility and choose among alternatives. If using standardized tests, it is crucial that the school psychologist know how valid the assessment is for use with the Native American population. This may entail reviewing the literature or consulting an expert in the field.

2. Family involvement. Extended family may play a large role in a Native American child's care and should be included in meetings regarding the assessment whenever possible (Garwick & Auger, 2000). Native American families may have different expectations of a service provider than a school psychologist encounters with European American families. A home visit may be an appropriate first meeting location in order to foster "common basing" and allow for a personal connection to be made. The assessment process should be carefully explained to the family including why it is useful and how information will be used (Allen, 1998). Garwick and Auger (2000) note that Native American families oftentimes ask few direct questions, talk little about their child's problem, and use indirect eye contact as a form of respect. Through interviews with parents of children with disabilities, they found that Native American parents would like providers to listen carefully, initiate questions, provide lots of information, and offer available resources when relevant. The above practices will promote comfort necessary for many Native American families to actively participate in the assessment process.

3. Cultural identity. The acculturation level, personal cultural identity, and developmental stage of the individual must be assessed. This may entail the use of a personal identity measure as well as an interview and home observation. It is also necessary to determine the language history and competence of the individual. This necessitates a home language survey as well as language assessments in English and ideally, the native language. Three specific recommendations are presented by Dauphanais and King (1992) that provide additional information particularly crucial when working with Native American students: (a) gather a developmental and social history with the aid of a family member, teacher, and classroom observation; (b) obtain an educational history from school records; and (c) request medical records prior to testing in order to determine any past physical problems that could affect both classroom and testing performance.

4. Choosing assessment tools. Choosing specific assessment tools involves determining whether a standardized and/or alternative assessment would be most beneficial. Each test should be examined for its research with the Native American population in question. Tests of pathology, particularly projective tests, should be avoided, as they have been found to be culturally biased for many Native Americans (Dauphanais & King, 1992). When assessing emotional and behavioral difficulties, instruments developed specifically with Native American populations should be used. Norms should be examined for their validity and the language examined for the client's ability to understand. Whenever possible, local norms should be used in order to provide data about a local tribe (Dauphanais & King, 1992). Alternative assessments such as curriculum-based measurement, dynamic assessment, or portfolio review should be considered in order to supplement standardized test results.

5. The assessment process. Dauphanais and King (1992) offer suggestions that should be followed during the initial meeting with a student. First, given Native American student's tendency to be relationship motivated rather than task oriented, relaxed rapport building is critical. Informal introductions and sharing of personal information may be beneficial. Finally, a Native

American student is likely to appreciate an explanation of the test purpose and process. Some assessments may need to be adapted for use with Native Americans. For example, rather than ask a Native American student to fill out a self-report measure, it may be more appropriate to use an interview style (Allen, 1998).

6. Evaluating the accuracy of the results. A test is most likely to be accurate if a diverse range of tools are used, in a broad range of settings. It is necessary to interview teachers to ensure observed behavior is accurate. When writing the report, statements describing the validity of the specific test for the individual Native American child should be made, with qualifications made where necessary (Allen, 1998; Dauphanais & King, 1992). Qualifications should be made for any test not normed with a Native American sample or empirically validated for use with Native American students.

7. Choose culturally appropriate recommendations for intervention. Once students' academic difficulties are adequately assessed, it is important to extend careful cultural consideration to the formation of intervention plans and academic goals. For setting academic goals, learning style preferences should be considered. For example, Nuby and Oxford (1998) found that a significant majority of Native Americans prefer a "perceiving" versus "judging" strategy for learning. This suggests that such students may need classroom flexibility, exploration, change, and openness, with opportunities to foster creativity. In addition, a Native American student who values collaboration, cooperation, and group success should be taught and evaluated through these methods rather than through typical individualistic and competitive models. Examining factors affecting educational attainment for Native American students, Fore and Chaney (1998) found that having a person who strongly promoted educational goals was associated with the decision to obtain higher education. Thus, a student mentor, or adult role model may be assigned to work with a Native American child in need of such a person. Students struggling to form a healthy identity may benefit from the promotion of wellness through self-awareness exercises. Knowledge of traditional healing practices, such as herbal remedies and healing ceremonies is also important in forming culturally relevant intervention suggestions for the family (Garwick & Auger, 2000). This knowledge may be gathered through discussion with the family, other tribal members, or written resources published about the specific tribal group. Once an assessment has been completed and intervention recommendations made, Allen (1998) recommends using an advisor from the specific tribal group, when available, to check against cultural bias and offer suggestions for relevant traditional healing practices.

8. Sharing results with the family. For a non-Native American assessor, it is especially important to spend adequate time reviewing results of the assessment with the family, due to potential distrust of professionals in European American society. Allen (1998) recommends allowing the Native American family members to read and comment on the written report. He often incorporates a family's comments into his report, or makes note of their comments within the report. In addition, Allen (1998) suggests offering the family choices of intervention, a practice in congruence with traditional healers. Similarly, Lowery and Mattaini (1999) suggest that long-term consequences of decisions be explored, all negative consequences be considered, and that all relevant parties are satisfied with the intervention recommendations.

9. Implementing and monitoring intervention. The ultimate goal of the assessment should be to create a successful intervention plan. The plan should be monitored closely in order to evaluate the success of the assessment and resulting intervention. Offering continued support of the family through availability to answer questions and listen to feedback regarding satisfaction with the intervention will help sustain parent support of the educational plan. In addition, maintaining an ongoing social relationship with the family and the tribal community at large will enhance intervention success.

CONCLUSION

The issues of assessment with Native American youth, as with any minority group, are extremely complex and require careful consideration. A basic understanding of the issues surrounding the Native American population is essential. For true competence, an investigation of the relevance of each measure used is necessary, as well as an understanding of the specific cultural values and beliefs of particular tribes in the community. In addition, the careful assessment of an individual's identity and level of acculturation is necessary in formulating the assessment battery and resulting interventions. Gaining cultural competence is a life-long process that requires research, observation, and personal growth.

REFERENCES

Allen, J. (1998). Personality assessment with American Indians and Alaska Natives: Instrument considerations and service delivery style. *Journal of Personality Assessment, 70*, 17-42.

Crawford, J. (1995). Indian bilingual education. In *Bilingual education: History, politics, theory, and practice* (pp. 177-194). Los Angeles: Bilingual Educational Services.

Dana, R. H. (1993). Native Americans. In *Multicultural assessment perspectives for professional psychology* (pp. 79-90). Boston: Allyn & Bacon.

Dana, R. H. (2000). The cultural self as locus for assessment and intervention with American Indians/Alaska Natives. *Journal of Multicultural Counseling and Development, 28*, 66-82.

Dauphanais, P., & King, J. (1992). Psychological assessment with American Indian children. *Applied and Preventive Psychology, 1*, 97-110.

Davidson, K. L. (1992). A comparison of Native American and European American students' cognitive strengths as measured by the Kaufman Assessment Battery for Children. *Roeper Review, 14*, 111-115.

Dolan, B. (1999). From the field: Cognitive profiles of First Nations and Caucasian children referred for psychoeducational assessment. *Canadian Journal of School Psychology, 15*, 63-71.

Fore, C. L., & Chaney, J. M. (1998). Factors influencing the pursuit of educational opportunities in American Indian students. *American Indian and Alaska Native Mental Health Research: The Journal of the National Center, 8*, 46-55.

Garrett, M. T. (1999). Soaring on the wings of the eagle: Wellness of Native American high school students. *Professional School Counseling, 3*, 57-64.

Garwick, A., & Auger, S. (2000). What do providers need to know about American Indian culture? Recommendations from urban Indian family caregivers. *Families, Systems, & Health, 18*, 177-189.

LaFromboise, T. D., & Low, K. G. (1998). American Indian children and adolescents. In J. T. Gibbs & L. N. Huang, (Eds.), *Children of color: Psychological interventions with culturally diverse youth* (pp. 112-142). San Francisco: Jossey-Bass.

Lowery, C. T., & Mattaini, M. A. (1999). The science of sharing power: Native American thought and behavior analysis. *Behavior and Social Issues, 9*, 3-23.

Nuby, J. F., & Oxford, R. L. (1998). Learning style preferences of Native American and African American secondary students. *Journal of Psychological Type, 44*, 5-19.

Thomas, A. (1999). School psychology 2000: A national database. *Communiqué, 28*(3), 12-13.

Walters, K. L. (1999). Urban American Indian identity attitudes and acculturation styles. In H. N. Weaver (Ed.), *Voices of First Nation people: Human services considerations* (pp. 163-178). New York: Haworth Press.

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Effectiveness of a Cognitive Behavioral Group Intervention for Elementary Aged Students

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This study investigates the effectiveness of a weekly cognitive behavioral counseling group with 153 first- through fifth-grade students referred with academic behaviors, academic motivation, and classroom behavioral problems. Students met weekly for six weeks with a school psychologist or intern in heterogenous groups of five similarly-aged students. Each week the classroom teacher provided an evaluative grade for all areas that were specified in an individualized student behavior plan. Significant improvement was found comparing baseline and week-6 grades. During the sixth week the most frequently occurring behavioral score was 3.00 (B grade). Improvement was not dependent on student grade level or type of problem identified by the teacher prior to the intervention. This study extends previous research by using a cognitive behavioral group intervention with early elementary students who had a broad range of classroom problems. Details regarding the progression of activities occurring in the groups are also provided.

School psychologists who participate on weekly school intervention teams often share teachers' frustrations when students with motivational or behavioral difficulties do not qualify for special education, and yet require intervention beyond the classroom to avoid failure. Previous research suggests that low grades and lack of school success are associated with subsequent serious behavior problems and/or school drop out (Cairns, Cairns, & Neckerman, 1989; Spivak & Markus, 1987). School-based interventions have the capacity to not only promote positive behavior change, but also reduce the incidence of youth mental health problems and decrease the need for more costly and intensive treatment services outside the school setting (Conoley & Conoley, 1991; Tuma, 1989). School personnel may utilize research-based interventions in the schools to address problems faced by many children, not appropriately served through special education.

The counseling community has long been challenged to find a fit between the goals and process of the educational system and those of counseling (Tharinger & Staffer, 1995). There are theoretical perspectives that are more amenable to use in the schools. The Go For It Club (GFC) is a rewarding and effective cognitive behavioral group counseling intervention that serves this need. GFC is an easily implemented procedure utilizing a weekly counseling group to teach, reward, and document a variety of positive outcomes. Goals of counseling from a social learning and cognitive behavioral perspective include: (a) changing children's cognitions, particularly about school behavior; (b) promoting behavioral change by reinforcing desired behavior; (c) and providing children with mild adjustment problems with positive behavioral models and vicarious learning experiences (Tharinger & Stafford, 1995). The discussion with students about the functions their behaviors serve for them and the teaching of replacement behaviors are crucial to linking problems with interventions (Batsche & Knoff, 1995; Browning Wright, & Gurman, 1998).

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Boutwell and Myrick's (1992) initial development of the GFC was an attempt to implement a developmentally appropriate cognitive behavioral approach in a school environment. In GFC, third- through fifth-graders met twice weekly for club sessions in groups of six to ten and were rewarded with a weekly party. The goal was to improve students' grades in one or more failing academic subjects. Students were not rewarded for group participation, but on the basis of weekly teacher ratings in their designated academic area. Students also gave themselves a rating each day on their contract. A special cheer was given to each child each week regardless of their previous week's success or failure. Children participated in a variety of activities each week, which were designed to improve academic achievement.

In the original study, academic improvement was shown by 83% of the 41 third-through fifth-graders by the end of their six-week GFC program (Boutwell & Myrick, 1992). In a second study of 29 students, 83% maintained their improved grades by the end of the grading period (Boutwell & Myrick, 1992). Earlier research suggests that less time-intensive treatments within the school setting can be delivered by teachers with treatment integrity (Gresham, 1989). Teachers in GFC were required only to give the participating student one grade in his or her designated goal area each week, and subsequently the students were rewarded in an ongoing manner. Because teachers tend to consistently favor interventions that are positive and rewarding for students (Clark & Elliot, 1988) the positive approach engendered in GFC was well received.

Research has shown that when individuals are encouraged to monitor their own behavior, the behavior being monitored is often modified without any other imposed contingency (Hallahan et al, 1983; Hallahan, Lloyd, Kosiewicz, Kauffman, & Graves, 1979; Sagatsky, Patterson, & Lepper, 1978). Successful experiences in completing goals at school may help students, whose locus of control is external, to understand that the effort they expend (more than luck or ability) leads to the positive outcomes they experience (Harvey, 1995).

For many years, social praise for academic behaviors has been shown to increase desired behaviors not only for the student being recognized, but for students listening to the student being rewarded as well (Lewis & Strain, 1978; Struble, 1971). For this reason, social praise coupled with immediate extrinsic reward is provided throughout group sessions of the GFC, modified for use in this study. The purpose of this investigation was to examine the effectiveness of the weekly cognitive behavioral counseling group for students exhibiting problems with academic behaviors, academic motivation, and classroom behaviors by evaluating these research questions: (a) What is the effect of GFC modified to include social praise on the class performance of students who participated in this study? (b) Will there be a significant impact on class performance by week, grade level, or contract type?

METHOD

Participants

Participants were students in grades one through five at three suburban elementary schools in the Torrance Unified School District (Los Angeles County). Kindergarten through fifth grade enrollments for the three schools ranged from approximately 600 to 1,000 (M = 750). Although ethnicity of the participating students was not recorded, the ethnic breakdown of the participating schools was between 40% - 65% Caucasian, 24% - 38% Asian, 9% - 13% Hispanic, 0% - 5% African American, and 2% - 4% other ethnicities. Participating students included 120 boys and 33 girls.

Referral and Assignment to Groups

Referrals to participate in the GFC clubs were initiated by teachers, school administrators, school psychologists, or parents. Most referrals were made through a School Intervention Team that met weekly to discuss and plan interventions for at-risk students. Typical school problems that this team addressed included: attendance, work

completion, rule compliance in the classroom, and general (mild) behavioral difficulties. Students were only allowed to participate in the GFC clubs if signed parent permission was obtained and if the students' classroom teachers agreed to give weekly grades in a goal/contract area of the teachers' choice (e.g., keeping hands to self, turning in homework, working quietly, giving compliments to other students, cooperating with others, being patient with others, paying attention in class, working independently, finishing work with best effort, complimenting self). Students were randomly placed in coeducational counseling groups with similarly-aged peers with no more than five students in each group. Groups were led by either a school psychologist or a marriage and family therapist intern under the supervision of the school psychologist.

Design of Counseling Groups

The design of counseling groups in this current study is based on previous Go For It Club (GFC) research (Boutwell & Myrick, 1992). The California version (CA-GFC) implemented in this study is an adaptation of the original GFC design. There are both similarities and differences with the earlier design. In the CA-GFC, first- through fifth-graders met once weekly for 30-45 minute sessions in groups of five similiarly-aged peers. Sessions ran for a minimum of six weeks. Counseling group members were challenged to obtain individualized goals. Goals were selected by the classroom teacher and focused on a variety of areas. In both GFC and CA-GFC, students gave themselves a rating each day of their contract. In CA-GFC, rewards were provided for appropriate participation in the group each week as well as for weekly teacher ratings of the student's success on their individualized contract. In CA-GFC and GFC, the Go For It Cheer was given to each child each week regardless of their previous week's success or failure. This recognition was believed to be intrinsically rewarding to the children. In CA-GFC, clear consequences with warnings were described to the students during the first week so they knew what to expect if a student did not follow the group's self-created rules for the counseling group. A variety of activities were included throughout the club sessions. Many of these activities where not included in the initial research.

Procedures

Weekly contract and reward. Each student maintained weekly cards with a specific behavioral goal chosen by the classroom teacher. Contracts focused on: prosocial behavior (26%), work completion (23%), classroom academic behaviors (22%), attention (13%), academic self-esteem (8%), and completing work and turning in work (8%). The fourth and fifth grade students evaluated themselves each day on a 1-3 scale: 1= I did my best, 2= I did okay, and 3= I need to try harder. The first-through third-grade students evaluated themselves each day with either a happy face, neutral face, or sad face, corresponding to the numeric 1-3 scale. At the end of the week each student received a letter grade from their teacher.

Differing levels of weekly prizes were available according to the grade rating each student received. For example, a student with a grade of "A" could choose a prize from any of the boxes, while a student with a grade of "B" could choose from the "B box," or "C box." Students with a grade of "D" or lower did not receive a prize, but all students were given the "Go For It Cheer" each week — "Go for it, Go for it, hey, hey, hey, Gracie, Gracie, You're on your way."

Group rewards. During each counseling group, students were given continual and immediate rewards of tokens coupled with verbal feedback from the leader such as: "I like the way you are waiting your turn, thank you for sharing," "I like the way you kept your hands to yourself," or "That sounded like a sincere compliment you gave." When possible, the leader attempted to reinforce the area specified on the weekly contract with verbal praise. Paper clips were used as the tokens since they were readily available at the school sites. At the end of each group session, the student who had the most paper clips received two

small stickers while all other students received one small sticker.

Session 1. The purpose of this session was explained to the students as was the reward system. Students were allowed to look closely at the reward boxes. Special rules for each group were created by the group members. There were clear consequences for the violation of group rules. No student was allowed to violate selected group rules more than three times. After a student's third violation in one group, the student would have to sit outside the group for 10 minutes if the infractions were minor (putting down other students), or would have to leave the group for that day for major infractions (hitting another student). The group leader demonstrated how she would raise her fingers as a warning saying, "That is one, you know we don't allow put downs in group," "That's two (after the second offense)," and "That's three (after the final offense)."

Each student's goal/contract was presented and each student announced their goal out loud. They were told that it was their responsibility to remember their contract and to work on changing their behavior. The group cheer was taught. To help learn student names, a foam ball was gently tossed from one student to another with students saying: "My name is____ and your name is____," to the previous student. Finally students passed the ball and stated what their goal was when the ball was passed to them. They returned to class with the first copy of their contract.

Later sessions. During each subsequent session, the group began by having children take turns telling about their behavioral successes and how they accomplished them. The group cheer was given and rewards chosen. As students established success in their contract area more group time was spent on social learning activities. Much of the group content was drawn from the earlier GFC (Boutwell & Myrick, 1992), however, additional focus and content was developed in each of the areas. Activities of the CA-GFC included:

1. Function of the behavior & replacement behavior discussions. Activities of this type included group discussions of motivational factors involved in behavior. For example, discussions evolved into conversations about why people do certain things and what they get out of it. The questions are asked, "What do you want to achieve?" "Are you really getting what you want by doing these things?" "What are other ways to get what you want?"

2. Self talk. Discussions in this area include specific instructions in "self talk." Self talk is a specific cognitive behavioral technique with which students first become aware of what they are saying to themselves to keep themselves from succeeding, or being as happy as they can be, and then practice changing their self talk to be more positive, constructive, and growth promoting. When extrinsic rewards are given, students are reminded to use positive self talk to compliment themselves and "to notice how good it feels inside when we help ourselves to do better." Using this approach, the extrinsic reward is paired and associated with the intrinsic reward.

3. Self reflection. A variety of self reflections may be provided during the groups. A popular activity in this section involves passing a foam ball from student to student while the group leader closes her eyes and claps. The student who has the foam ball when the clapping stops then shares whatever topic the leader has chosen, such as: (a) one self talk we can use to help in the goal area, (b) one thing you can do to improve in the goal area, (c) one way you helped another person this week, (d) one new way to get what you want, (e) share one way to control anger, (f) one time you felt successful at school, (g) the best time to do homework, or (h) three words the teacher might use to describe you.

4. Positive behaviors for achievement. These discussions focus on a child's responsibility for their own achievement and attempt to support an internal locus of control for academic success. The group makes a list of classroom behaviors that are associated with academic success. The participants then discuss which behaviors they are not currently using and would be willing to utilize for the next week.

5. Affective expression. This activity focuses

on teaching the awareness of feelings and the labeling of feelings. Activities include: (a) making a list of pleasant and unpleasant feeling words and talking about when students felt that way, (b) talking about physical sensations when we are feeling different feelings, (c) talking about facial expressions that tell us how other people are feeling, (d) sharing one pleasant and one unpleasant feeling students had that week, and (e) talking about using "I statement," in the format, "I feel _____ when _____."

6. Social validation. During group sessions, students are encouraged to verbally validate each other. Complimenting others is presented as a skill to learn. Students begin by: (a) talking about the importance of giving compliments to ourselves and others, (b) sharing that "it is hard for some people to give compliments so we have to practice," (c) explaining that we can always find something we like in other people, and (d) cautioning students to be sincere and not "put other students down." Taking turns, all students in the group give one chosen student a compliment. The group leader records compliments that each student receives on a personalized chart that the student will keep after the last group session.

7. Perspective taking. Activities of this type help students to recognize how positive and negative self attributions impact our experience. Students use the metaphor of "attitude glasses" and talk about how we see things differently when we have different attitudes such as: "Nobody likes me," "I hate school," compared to "People will like me if I am nice to them," "I can do it better and better if I try hard," or "Learning is fun." Part of this discussion may also focus on how to assume responsibility in our lives and understanding that phrases like, "I can't do it" really means "I won't do it."

8. Social problem solving. This approach is used when students disclose problems or talk about their difficulties meeting their weekly contracts. Discussion of problem solving steps and the application of a problem solving model are introduced. Students are explicitly taught the following model: (a) What is the problem? (b) What are some possible solutions? (c) Choose a solution and try it, and (d) Compliment myself that I did a good job.

9. Role playing and modeling. In this technique, puppets are used in role playing experiences to help a fictional new student at school who wanted to be successful and work with his teacher. Role playing with puppets was used to demonstrate how a student at school can make new friends by giving compliments and being positive.

All participating students were involved in a six-week cognitive behavioral counseling groups utilizing the strategies described above. All students had teacher-developed contracts, and received weekly evaluations from their teachers. Groups where composed of similiarly-aged peers, but were heterogenous with regard to contract type. The format of each group was the same across types of student target behavior contracts. Student contracts were grouped into six contract areas according to commonalities of contract content.

The contract area *Prosocial Behavior* included contracts such as: keeping hands to oneself or cooperating with others. The contract areas of *Work Completion* focused on completing work in one or more subject areas. *Academic Classroom Behavior* included contracts such as: staying in assigned seat, working quietly, getting started promptly, participating in class activities, listening to the teacher, or completing neat work. *Attention* contracts were general in nature, such as, "I will pay attention in class." *Academic Self Esteem* contracts generally focused on having the students compliment themselves. *Turning In Work* focused on turning in completed work, on time, in one or more subject areas.

RESULTS

Analyses were completed to examine the following research questions: (a) What is the effect of CA-GFC on the contract grade of students who participated in this study? (b) Is there a significant impact on contract grade by week, grade level, or contract type?

The weekly classroom teacher performance

ratings were converted to the following numerical equivalents: A+ = 4.3, A = 4.0, A- = 3.7, B+ = 3.3, B = 3.0, B- = 2.7, C+ = 2.3, C = 2.0, C- = 1.7, D+ = 1.3, D = 1.0, D- = 0.7, F+ = 0.3, F =0. Table 1 shows the average of student grades by week. The Baseline mean at week one was 1.05. Subsequent week averages ranged from 2.41 to 2.61 (*SD* =.87 to .96). These results demonstrate that teachers' behavioral ratings rose from an initial grade equivalent of D to between a C+ and B- during the CA-GFC group. The modal grade during the sixth week of this group intervention was a B. Significant improvement was shown from student baseline (M = 1.06, SD = .54) to student contract grades in the last week of participation (M = 2.61, SD = .96), t (126) = 16.487, $p < .000$).

There were 20% missing student contract grades during the CA-GFC. A missing student contract grade could reflect student absence, teacher absence, or students forgetting to bring their contracts to their CA-GFC. Fifty-three students had contract grades for all group sessions. For purposes of repeated measures analysis, missing contract grades were replaced using the series mean estimation method. For purposes of calculation, this method replaces missing values with the mean for the entire series. ANOVA results should therefore be interpreted cautiously.

An analysis of a 5 (Contract type) x 6 (Grade level) ANOVA with repeated measures on Weeks was completed (see Table 2). CA-GFC effectiveness and student progress in the six-week program was not significantly impacted by grade level, type of contract, or interaction of these two variables. As mentioned earlier, students made significant overall progress while in the program.

Table 1
Means and Standard Deviations of Contract Grade by Week

Week	*Mean*	*SD*
1(baseline)	1.06	.54
2	2.41	.93
3	2.44	.91
4	2.58	.87
5	2.57	.91
6	2.61	.96

Table 2
Analysis of Variance for Contract Grades During CA-GFC

Source	*df*	*F*
Between-Subject Effects		
Grade	4	0.45
Contract	5	1.25
Grade X Contract	18	1.14
Error	125	(1.35)
Within Subjects Effects		
Weeks	5	80.17*
Weeks x Grade	20	0.86
Weeks x Contract	25	1.30
Weeks x Grade x Contract	90	1.30
Error	625	(0.40)

Note. Values enclosed in parentheses represent mean square errors.
* $p < .0001$

DISCUSSION

The primary purpose of this study was to evaluate the effectiveness of a cognitive behavioral group intervention with a first through fifth grade population experiencing a range of academic and behavior problems. Previous GFC studies focused on third-through fifth-grade students who had failed one or more academic areas. This study extends this research to younger children with a variety of academic and behavioral needs. The results showed significant progress over the six weeks of the intervention, with the weekly average of participating students rising from an initial grade of D to between a C+ and B-. The CA-GFC students also showed improvement with only one session per week rather than the two sessions and weekly party included in the original GFC. More immediate rewards were presented for appropriate participation during group sessions in the CA-

GFC, consequences were described, and a greater variety of group activities were utilized. These may have been important because 25% of the participating students had behavioral objectives in their contracts and another 13% had objectives related to task attention.

Limitations and Future Directions

While the demanding nature of the job of a school psychologist makes such research difficult to complete, the long-term efficacy of this type of approach remains to be completed. Students failing to bring contracts to group for a variety of reasons remains as an area for improvement in the CA-GFC and GFC. However, the outcome of this intervention study supports the development of group counseling programs in the schools. In future studies, direct verbal feedback from teachers to the group leaders or written feedback forms completed by teachers might be considered when contracts are not returned to the group sessions. Also, given the limited number of students participating in this study, further research is necessary to replicate these findings.

In less than 10 minutes per child per week, the group leaders helped to facilitate satisfying outcomes for the students participating in this study. It appears that students do benefit from groups in which feedback, reward, and replacement behaviors are consistently addressed on a weekly basis. With the cost-effective CA-GFC program, further research is warranted to evaluate if observed progress persists and if progress is maintained over time periods.

REFERENCES

Batsche, G. M., & Knoff, H. M. (1995). Best practices in linking assessment to intervention. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology III* (pp. 569-585). Washington, DC: National Association of School Psychologists.

Boutwell, D., & Myrick, R. D. (1992). The go for it club. *Elementary School Guidance and Counseling, 27*, 65-72.

Browning Wright, D., & Gurman, H. B. California Association of School Psychologists, Diagnostic Center, Southern California Positive Intervention Task Force. (1998). *Positive intervention for serious behavior problems: Best practices for implementing the positive behavioral intervention regulations*. Sacramento, CA: California Department of Education.

Cairns, R. B., Cairns, B. D., & Neckerman, H. J. (1989). Early school dropout: Configurations and determinants. *Child Development, 60*, 1437-1452.

Clark, L., & Elliott, S. N. (1988). The influence of treatment strength information on knowledgeable teachers' pretreatment evaluations of social skills training methods. *Professional School Psychology, 3*, 241-251.

Conoley, J. C., & Conoley, C. W. (1991). Collaboration for child adjustment: Issues for school- and clinic-based psychologists. *Journal of Consulting and Clinical Psychology, 59*, 821-829.

Gresham, F. M. (1989). Assessment of treatment integrity in school consultation and prereferral intervention. *School Psychology Review, 18*, 37-50.

Hallahan, D. P., Hall, R. J., Ianna, S. O., Kneedler, R. D., Lloyd, J. W., Loper, A. B., & Reeve, R. E. (1983). Summary of research findings at the University of Virginia Learning Disabilities Research Institute. *Exceptional Education Quarterly, 4*, 95-114.

Hallahan, D. P., Lloyd, J., Kosiewicz, M. M., Kauffman, J. M., & Graves, A. W. (1979). Self-monitoring of attention as a treatment for a learning disabled boy's off-task behavior. *Learning Disability Quarterly, 2*, 24-32.

Harvey, V. S. (1995). Best practices in teaching study skills. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology III* (pp. 931-942). Washington, DC: National Association of School Psychologists.

Lewis, B. L., & Strain, P. S. (1978). Effects of feedback timing and motivational content on teachers' delivery of contingent social praise. *Psychology in the Schools, 15*, 423-430.

Myrick, R. D. (1993). *Developmental guidance and counseling: A practical approach*. Minneapolis, MN: Educational Media Corporation.

Sagatsky, G., Patterson, C. J., & Lepper, M. R. (1978). Training children's self-control: A field experiment in self-monitoring and goal setting in the classroom. *Journal of Experimental Child Psychology, 25*, 242-253.

Spivak, G., & Marcus, J. (1987). Marks and classroom adjustment as early indicators of mental health at age twenty. *American Journal of Community Psychology, 15*, 35-55.

Strublem J. B. (1971). The application of positive social reinforcement to the behaviors of getting ready to work. *School Applications of Learning Theory, 1*, 34-39.

Tharinger, D., & Stafford, M. (1995). Best practices in individual counseling of elementary-age students. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology III* (pp. 893-907). Washington, DC: National Association of School Psychologists.

Tuma, J. M. (1989). Mental health services for children: The state of the art. *American Psychologist, 44*, 188-199.

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A Synthesis of Grade Retention Research: Looking Backward and Moving Forward

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Amidst an era emphasizing educational standards and accountability, and politicians calling for an end to social promotion, the practice of grade retention has become increasingly popular. Consistent with the political zeitgeist across the country, the California Legislature has recently approved bills directing educational professionals to establish promotion performance standards. These actions have revived many debates regarding the relative merits and limitations of grade retention and social promotion. Given the abundance of research examining the efficacy of grade retention as well as alternative prevention and intervention strategies, education professionals are encouraged to make informed decisions. School psychologists are in a unique position to play an important role in encouraging educational professionals to use interventions with demonstrated effectiveness. This synthesis of grade retention research provides a review of: (a) research examining the effects of grade retention on academic achievement, (b) research examining the effects of grade retention on socioemotional adjustment, (c) research exploring long-term outcomes associated with grade retention, (d) a conceptual framework to facilitate interpretation of the research, and (e) ideas to move forward in identifying and implementing effective alternatives to grade retention. School psychologists and other educational professionals are encouraged to incorporate the research literature when advocating for appropriate prevention and intervention services on behalf of students.

Amidst an era emphasizing educational standards and accountability, research examining the efficacy of grade retention warrants further review and consideration. "Grade retention," also known as "non-promotion," "flunking," " being retained," and "being held back," refers to the practice of requiring a student who has been in a given grade level for a full school year to remain at that same grade level for a subsequent school year (Jackson, 1975; Shepard & Smith, 1989). Research indicates that across the nation, 30% to 50% of students will be retained at least once by the 9th grade (Alexander, Entwisle, & Kabbani, 1999; Hauser, Pager, & Simmons, 2000; McCoy & Reynolds, 1999; Shepard & Smith, 1989). Nationally, it is estimated that 5-10% of students are retained annually, which translates to over 2.4 million children every year that must complete an extra year of schooling (Dawson, 1998a; Shepard & Smith, 1990). Current trends appear to be moving toward increased retention rates as "standards" and "accountability" have received increasing emphasis in the field education (McCoy & Reynolds, 1999; U.S. Department of Commerce, Bureau of Census, 1966, 1990).

During the late 1990s, in each State of the Union Address, President Clinton (1997, 1998, 1999) repeatedly called for an end to social

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promotion. By 1998, at least 10 states had developed explicit policies for ending social promotion (American Federation of Teachers, 1998). Governors of some states (e.g., Texas, California, Wisconsin, Michigan, and Delaware) have pledged to eliminate social promotion (U.S. Department of Education, 1999). Moreover, across the country educational policies and related legislation aimed at increasing standards and emphasizing accountability, may result in more children being retained at grade level (U.S. Department of Education, 1999).

In California during September 1998, Assembly Bills 1626 and 1639 were signed into law[1]. Broadly, these bills outline new promotion and retention requirements for the students in California, directing school districts to retain students who do not meet certain performance criteria (to be determined by the local education agency), and to provide summer remediation programs for these students (U.S. Department of Education, 1999). The legislation proposed that the 1998-1999 academic year be a planning year during which each school board was required to develop policies and procedures related to implementation of the legislation, including: (a) identifying a process for early identification of students at risk of retention; (b) developing a process for parent notification; (c) outlining the teachers' discretion in the promotion or retention decision; and (d) establishing promotion standards (based on standardized testing, students' grades, or other indicators or academic achievement) for students in grades, 2, 3, and 4 (in addition to promotion to both middle and high school). For grades 2 and 3, districts were required to establish promotion standards in reading only. At the other grade levels, districts were required to set standards in language arts, reading, and math. Considering the interplay of standards, accountability, and grade retention as described above, research examining the efficacy of grade retention to facilitate student progress must be considered.

Too often, it seems as though "anecdotes, clinical experience, and folklore" overshadow empirical research when discussing the merits and limitations of grade retention (Webster, 2000, p. 17). The lack of emphasis on results of research is disconcerting considering the abundance of studies and scholarly analysis examining the efficacy of grade retention during the past century. As purveyors of knowledge related to facilitating the socioemotional adjustment and academic success of students, school psychologists may provide leadership in disseminating the results of research related to grade retention. Towards this end, this succinct synthesis of grade retention research addresses five important aspects: (a) a summary of research examining the effects of grade retention on academic achievement, (b) a synopsis of research examining the effects of grade retention on socioemotional adjustment, (c) a discussion of long-term outcomes associated with grade retention, (e) an overview of a conceptual framework to facilitate interpretation of the research, and (e) provides ideas to move forward in identifying alternatives to grade retention. The discussion below includes many references of important resources that may be gathered to provide materials for review when discussing the topic with teachers, principals and other educational professionals.

STATISTICAL META-ANALYSES PROVIDE INFORMATION ON OUTCOMES

This synthesis includes the results from published meta-analyses of research examining outcomes associated with grade retention (Holmes, 1989; Holmes & Matthews, 1984; Jimerson, 2001). These three meta-analyses provide information from studies of grade retention published between 1925-1999 (see Table 1 for a summary of these findings). In brief, meta-analysis is based on the concept of effect size (ES) (Glass, 1978). Calculation of effect sizes allows researchers to

[1] Information on these statutes may be obtained from the California Department of Education, see AB1626 (Chapter 742), AB1639 (Chapter 743), and also SB1370 (Chapter 942) from the Statutes of 1998.

Table 1
Summary of Mean Effect Sizes (ES) from Three Meta-Analyses Examining the Outcomes of Studies Exploring the Efficacy of Grade Retention.

	Holmes & Matthews (1984)	Holmes (1989)	Jimerson (2001)
Overall Effect Size	-.37 [575]	-.15 [861]	-.31 [246]
Academic Achievement	-.44 [367]	-.19 [536]	-.39 [169]
Language	-.40 [85]	-.16 [106]	-.36 [11]
Reading	-.48 [75]	-.08 [144]	-.54 [52]
Mathematics	-.33 [77]	-.11 [137]	-.49 [48]
Total/Composites	na	na	-.20 [13]
GPA	-.58 [4]	-.58 [4]	-.18 [45]
Socioemotional Adjustment	-.27 [142]	-.09 [234]	-.22 [77]
Social	-.27 [60]	-.09 [101]	-.08 [12]
Emotional	-.37 [9]	.03 [33]	-.28 [13]
Behavioral	-.31 [13]	-.13 [24]	-.11 [30]
Self-Concept	-.19 [34]	-.13 [45]	-.04 [16]
Adjustment Composite	na	na	-.15 [4]
Attitude Toward School	-.16 [26]	-.05 [39]	na
Attendance	-.12 [6]	-.18 [7]	-.65 [2]

na = not available.
[Numbers in brackets indicate the number of effect sizes used in calculating the mean effect size].
Note. Negative numbers represent that results of analyses favored the matched comparison group of students relative to the retained students.

systematically pool results across studies. Thus, results from multiple studies may be included in order to examine the relative benefit of an educational intervention. Meta-analysis statistical procedures provide a measure of the difference between two groups that is expressed in quantitative units that are comparable across studies. Because each effect size is standardized relative to the comparison group standard deviation, it is possible to combine the results from different measures at different grade levels. Analyses resulting in a negative effect size suggest that an intervention (retention in this case) had a negative or deleterious effect relative to the comparison groups of promoted students (review Cohen, 1988; Cooper & Hedges, 1994; Glass, 1978; Glass, McGaw, & Smith, 1981; Hedges & Olkin, 1985; Holmes, 1984; Hunter & Schmidt, 1990; Light & Pillemer, 1984 for additional information on meta-analyses).

Holmes and Matthews (1984) performed the first comprehensive statistical meta-analysis exploring the effects of retention on elementary and junior high school students using both achievement and socioemotional outcomes. This meta-analysis included 44 studies published between 1929 and 1981, totaling 4,208 retained students and 6,924 regularly promoted students. Five years later, Holmes (1989) included an additional 19 studies published between 1981-1989 to generate a total of 63 studies published between 1925-1989 where retained students were followed and compared to promoted students. Of the 63 studies in this review, 25 of these studies included matched participants (e.g., IQ, achievement, SES, gender,

grades, and other variables). Jimerson (2001) provides the most recent systematic review and meta-analysis of studies examining the efficacy of grade retention. Through a systematic literature search, Jimerson (2001) included 20 articles published between 1990-1999, totaling over 1,100 retained students and over 1,500 regularly promoted students. One of the key criteria for selection in the Jimerson (2001) meta-analysis was that the study must have included an identifiable comparison group of promoted students. Thus, the results discussed below include effect sizes from the 83 studies published between 1925-1999 included in the three previous meta-analyses (Holmes, 1989; Holmes & Matthews, 1984; Jimerson, 2001).

Methodological variation. With nearly 100 years of research on grade retention, the quality of studies has certainly varied. Historically, the most commonly noted methodological concerns include: (a) too often outcome analyses compare pre- and post-test scores of retained students rather than using a comparison group; (b) when comparison groups are used, characteristics are often not delineated; (c) most studies analyze only academic achievement and rarely include socioemotional outcomes; (d) few studies document remedial services during the repeated year; (e) few studies examine the long-term outcomes associated with early grade retention; and (f) data collected 30-40 years ago may be outdated (Alexander, Entwisle, & Dauber, 1994; Holmes, 1989; Jackson, 1975; Jimerson, Carlson, Rotert, Egeland, & Sroufe, 1997; Niklason, 1984, 1987; Rose, Medway, Cantrell, & Marus, 1983). Current scholars have advanced the study of grade retention attending to common critiques and methodological concerns.

It should be noted that of studies during the most recent decade (1990-1999) the 20 published studies examining grade retention addressed many of the methodological limitations described above (Jimerson, 2001). For instance, each of the 20 studies included a comparison group, 16 of the 20 included socioemotional outcomes in addition to academic achievement, and each study delineated the characteristics of the matched comparison groups. Several studies included information on remedial services and a few studies extended from kindergarten through high school. While methodological limitations prohibit unequivocal conclusions when considering any single study in isolation, the confluence of results warrants further consideration (Jimerson, 2001).

THE EFFECTS OF GRADE RETENTION ON ACADEMIC ACHIEVEMENT

In general, the confluence of research results fails to demonstrate academic achievement advantages for retained students relative to comparison groups of low-achieving promoted peers. Holmes (1989) reports that 54 studies showed negative achievement effects when retained children went on to the next grade level. Of nine studies that reported positive short-term achievement effects, the benefits were shown to diminish over time and disappear in later grades (Holmes, 1989). The overall effect sizes for academic achievement outcomes in the Holmes and Matthews (1984) and Holmes (1989) meta-analyses were -.44 and -.19 respectively (Table 1). Jimerson (2001) reports, of the 175 analyses of academic achievement outcomes, 9 resulted in significant statistical differences favoring the retained students and 82 resulted in significant statistical differences favoring the comparison group of low achieving peers. Of the 9 analyses favoring the retained students, 6 reflect differences during the repeated year (e.g., second year in kindergarten). While a few analyses demonstrated achievement gains in the years immediately following the retention, these gains were not shown to be maintained. The overall average effect size across academic achievement outcomes was -.39, with a high of -.54 for reading and a low of -.18 for grade point average (Table 1). Thus, results indicated that overall the retained group scored .39 of a standard deviation unit *lower* than the comparison promoted group. The results of the meta-analyses of nearly 700 analyses emerging from research during the past 75 years dem-

onstrate consistent negative effects of grade retention on subsequent academic achievement. Regarding achievement during adolescence, the author knows of no published studies demonstrating significant advantages in achievement for retained students over matched comparison peers during middle school and high school.

THE EFFECTS OF GRADE RETENTION ON SOCIOEMOTIONAL ADJUSTMENT

Relatively fewer studies have addressed the social and psychological adjustment outcomes of retained students with about 320 analyses being included in the meta-analyses. Considering over 40 studies including 234 analyses of socioemotional outcomes, Holmes (1989) concluded, on average the retained students display poorer social adjustment (-.09), attitudes toward school (-.05), attendance (-.18), and more problem behaviors (-.13) in comparison to matched controls (Table 1). Jimerson (2001) reports that 16 studies yielded 148 analyses of socioemotional adjustment outcomes of retained students relative to a comparison group of students, of these 8 resulted in statistical significance favoring the retained students and 13 were statistically significant favoring the comparison group. The overall average effect size across studies published between 1990-1999 was -.22. It is noted that those studies focusing on older children often report poorer adjustment for retained students (Bachman, Green, & Wirtanen, 1971; Finlayson, 1977; Godfrey, 1972; Hubbell, 1981; Jimerson, 1999; Jimerson et al., 1997; Plummer & Graziano, 1987; Safer, 1986; White & Howard, 1973). In addition, related research indicates that many retained students have difficulties with their peers (Byrnes, 1989; Shepard & Smith, 1990). The author knows of no published research evidence of beneficial effects of grade retention on social and personal adjustment in junior high or high school. School psychologists should be prepared to present a summary of results from systematic, comprehensive reviews and meta-analyses of research examining the efficacy of grade retention, as this literature provides remarkably consistent results across the past 25 years (Holmes, 1989; Holmes & Matthews, 1984; Jackson, 1975; Jimerson, 2001; see Jimerson 2001 for a brief summary of each of these studies, conclusions from each are provided in Table 2).

GRADE RETENTION AND LONG-TERM OUTCOMES

Relatively few studies have examined long-term outcomes associated with grade retention. One such study is a 21-year longitudinal study examining outcomes through age 20 (Jimerson, 1999). The results of this 21-year prospective longitudinal study comparing retained students, low-achieving but promoted students, and a control group, provide evidence that retained students have a greater probability of poorer educational and employment outcomes during late adolescence. In particular, retained students had lower levels of academic adjustment at the end of 11th grade, were more likely to drop out of high school by age 19, were less likely to receive a diploma by age 20, were less likely to be enrolled in a post-secondary education program, received lower education/employment status ratings, were paid less per hour, and received poorer employment competence ratings at age 20 in comparison to a group of low-achieving students (Jimerson, 1999). In addition, the low-achieving but promoted group was comparable to the control group on all employment outcomes at age 20. Results from other longitudinal samples yield similar findings, suggesting poorer long-term outcomes for retained students relative to a comparison group (Alexander, Entwisle, & Dauber, 2000; Sandoval & Fitzgerald, 1985; Temple, Reynolds, & Ou, 2000). The association of grade retention and subsequent dropout has received much attention in the past decade.

In their book reviewing research on grade retention, Shepard and Smith (1990) concluded, "Although grade retention is widely practiced, it does not help children to 'catch up.' Retained children may appear to do better in the short term, but

Table 2
Conclusions from Systematic, Comprehensive Reviews and Meta-Analyses of Research Examining the Efficacy of Grade Retention

"One general conclusion about the effects of grade retention relative to grade promotion is clearly warranted by all the results taken as a whole: There is no reliable body of evidence to indicate that grade retention is more beneficial than grade promotion for students with serious academic or adjustment difficulties. ... Thus, those educators who retain pupils in a grade do so without valid research evidence to indicate that such treatment will provide greater benefits to students with academic or adjustment difficulties than will promotion to the next grade." (Jackson, 1975; p. 627)

"Those who continue to retain pupils at grade level do so despite cumulative evidence showing that the potential for negative effects consistently outweighs positive outcomes. Because this cumulative research evidence consistently points to negative effects of non-promotion, the burden of proof legitimately falls on proponents of retention plans to show there is compelling logic indicating success of their plans when so many other plans have failed." (Holmes & Matthews, 1984; p. 232)

"When only well-matched studies were examined, a greater negative effect was found for retention than in the research literature as a whole. In studies where retained children and promoted controls matched on IQ and prior achievement, repeating a grade had an average negative effect of -.30 standard deviations. The weight of empirical evidence argues against grade retention." (Holmes, 1989; p. 28)

"Studies examining the efficacy of early grade retention on academic achievement and socioemotional adjustment that have been published during the past decade report results that are consistent with the converging evidence and conclusions of research from earlier in the century that fail to demonstrate that grade retention provides greater benefits to students with academic or adjustment difficulties than does promotion to the next grade." (Jimerson, 2001; p. 327)

they are at much greater risk for future failure than their equally achieving, non-retained peers" (p. 84). Studies examining the association of grade retention and dropping out of high school consistently have demonstrated that students who are retained are more likely to drop out of school prior to graduation than students who are not retained (Jimerson, Anderson, & Whipple, 2001). The striking association of grade retention and dropping out of high school recently led to the statement "we've won the battle but lost the war," in reference to the long-term outcomes of grade retention (Dawson, 1998b, p. 21). Moreover, dropping out is associated with numerous deleterious outcomes including fewer employment opportunities, substance abuse, and arrests (Cairns & Cairns, 1994; Catterall, 1987; Center for the Study of Social Policy, 1994; McDill, Natriello, & Pallas, 1986; Steinberg, Blinde, & Chan, 1984). School psychologists and others reviewing the efficacy of grade retention on academic success would benefit from awareness of the literature addressing the association between grade retention and dropping out.

Jimerson et al. (2001) provide a comprehensive review of dropout research that examines grade retention as a predictor variable. A systematic review of 17 studies examining dropping out of high school prior to graduation suggests that grade retention is one of the most powerful predictors of dropout status. Of the 17 studies including grade retention, *all* 17 found grade retention to be associated with subsequent dropout. Educational professionals, researchers, parents, and

policymakers considering the efficacy of grade retention are encouraged to consider the implications of these findings. The research demonstrates that children retained during elementary school are at an increased risk of dropping out of high school (Jimerson et al., 2001). Tuck (1989) reported that up to 78% of dropouts were retained at least once, while other studies suggest that grade retention increases the risk of dropping out between 20% and 50% (Bachman, Green, & Wirtanen, 1971; Jimerson, 1999). Research suggests that retained students are 2 to 11 times more likely to drop out (Alexander, Entwisle, & Kabbani, 1999; Bachman et al., 1971; Cairns, Cairns, & Neckerman, 1989; Ensminger & Slusarick, 1992; Fine, 1989, 1991; Grissom & Shepard, 1989; Lloyd, 1978; McDill et al., 1986; Nason, 1991; Pallas, 1986; Roderick, 1994, 1995; Rumberger, 1987, 1995; Shepard & Smith, 1989, 1990; Stroup & Robins, 1972; Tuck, 1989). Grade retention has been identified as the single most powerful predictor of dropping out (Rumberger, 1995). Jimerson et al. (2001) provide a summary of each of the above studies. In sum, past research provides evidence that repeating a grade provides few remedial benefits and in the long run, places students at a higher risk of dropping out of school (Roderick, 1995; Jimerson, 1999, 2001; Jimerson et al., 2001; Jimerson et al., 1997).

A CONCEPTUAL FRAMEWORK

The transactional model of development (Sameroff & Chandler, 1975) may facilitate the interpretation of the research examining outcomes associated with grade retention (Jimerson, 1999). The transactional model posits that developmental processes reflect the transactions between individuals and environments in which each is altered by the other, and that these transactions impact subsequent interactions in an ongoing continuous manner (Sameroff & Chandler, 1975). Each experience in one's developmental history has an impact on how she or he responds to subsequent experiences, which will similarly impact experiences subsequent to these events and so on (Sameroff, 1992; Sameroff & Chandler, 1975). From this perspective, current outcomes are always a product of current circumstances and one's developmental history (Sameroff, 1992; Sameroff & Fiese, 1990; Sroufe et al., 1999). Thus, the transactional model of development gives special consideration to the confluence of earlier factors, which ultimately propel individuals towards alternative pathways. For instance, the experience of being retained may influence numerous factors determined to be associated with dropping out of high school (e.g., student's self-esteem, socioemotional adjustment, peer relations, and school engagement).

There are a variety of socioemotional and achievement outcomes associated with grade retention during elementary school. To understand the effects of education on children, we must acknowledge the transactional nature of students' developmental history, their experiences at school, as well as other contemporaneous experiences (see Cairns & Cairns, 1994; Dryfoos, 1990; Evans & DiBenedetto, 1990; Jimerson, 2001; Jimerson, et al., 2001; Kirsch, Jungeblut, Jenkins, & Kolstad, 1993; Kronick & Hargis, 1990; Sroufe, Egeland, & Carlson, 1999; Wehlage, Smith & Lipman, 1992; for further discussion).

From a transactional developmental perspective, the outcomes associated with grade retention are likely a result of the confluence of factors throughout development, all of which work in an increasingly deleterious probabilistic manner over time. Rather than suggesting that grade retention singularly and inevitably leads to associated outcomes in a direct and causal manner, the transactional perspective reminds us to consider the complex interplay of individual and experiential influences across time. There are school, family, and individual characteristics associated with the likelihood of grade retention (Jimerson, 1999) and these characteristics have been documented influences on subsequent development and achievement trajectories. Consideration of these characteristics has important implications when selecting appropriate remedial intervention strategies. Considering the developmental history and assorted circumstances (e.g., low SES, single-par-

ent households, lower cognitive scores) of many retained students, it is not surprising that research has failed to demonstrate that retaining a child at grade level provides long-term effectiveness on socioemotional or achievement outcomes. Simply having a student repeat a grade is unlikely to address the multiple factors influencing poor achievement or adjustment that led to the student being retained to begin with. The basic idea is that children who are at risk as a result of poor achievement or adjustment require additional resources or services to facilitate achievement trajectories. Thus, the transactional model of development provides a conceptual framework to facilitate the interpretation of achievement, socioemotional, and behavioral outcomes associated with early grade retention and emphasizes the importance of considering alternative early intervention strategies.

MOVING FORWARD

The emphasis on educational standards and accountability has resulted in a recent publication from the U.S. Department of Education (1999) entitled "Taking Responsibility for Ending Social Promotion." Within this guide for educators and policymakers, Sandra Feldman of the American Federation of Teachers notes, "Neither social promotion nor holding kids back without help is a successful strategy for improving learning" (U.S. Department of Education, 1999; p. 4). Richard Riley, former United States Secretary of Education, indicates that, "Taking responsibility for ending social promotion means ensuring that students have the opportunity and assistance they need to meet challenging standards." (U.S. Department of Education, 1999). This recent rhetoric underscores the importance of appropriate remedial strategies and emphasizes the responsibility of educational professionals and families in facilitating achievement trajectories of these students.

In reviewing recent literature addressing social promotion, it is important to note that often "grade retention" could be substituted for "social promotion" and conclusions would remain the same. For instance, consider the quote above from the Secretary of Education, taking responsibility for ending *grade retention* also means ensuring that students have the opportunity and assistance they need to meet challenging standards. In addition the content of President Clinton's Memorandum (February 23, 1998, included in U.S. Department of Education, 1999) for the Secretary of Education addressing the subject of "Helping Schools End Social Promotions" is consistent with the basis for helping schools end *grade retention*. For example,

> In our efforts to promote higher standards and to lead to increased student achievement, the standards must count. Students must be required to meet them and schools must adequately prepare each student to do so. ... Neither promoting students when they are unprepared nor simply retaining them in the same grade is the right response to low student achievement. ... Ending social promotions by simply holding more students back is the wrong choice. Students who are required to repeat a year are more likely than other students to eventually drop out, and few catch up academically with their peers. The right approach is to ensure that more students are prepared to meet challenging academic standards in the first place. ... Schools must implement those proven strategies that will prepare students to meet rigorous standards the first time. (U.S. Department of Education, 1999; pp. 1-2)

Too often, educational professionals debate the merits and limitations of "social promotion" versus "grade retention." A more constructive discussion would focus on specific educational strategies to facilitate the education of children at-risk of academic failure. As such, the recent emphasis on empirically supported interventions will hopefully provide valuable insight regarding appropriate academic interventions (Stoiber & Kratochwill, 2000; Kratochwill, Stoiber, & Gutkin, 2000; Kratochwill & Stoiber, 2000).

While it is beyond the scope of this article to review all possible alternative remedial strategies to facilitate the educational success of children, in

general, empirically supported programs would be optimal. For instance, strategies such as parent involvement, early reading intervention, direct instruction, cognitive behavioral modification, and systematic formative evaluation, have each emerged as promising strategies in the research literature. Recognizing the multiple influences on student's adjustment and achievement at school, it is important to consider comprehensive school-wide prevention and intervention programs that promote both socioemotional and cognitive competence.

Parental involvement has consistently been found to lead to greater success among students (Christenson, 1995; Harrison, 1999; Swap, 1993). For example, weekly routine, structure and use of time out of school, homework practices, and family attitude toward the child's education are all factors that can affect a child's school performance (Sheridan & Kratochwill, 1992). Parent education can facilitate that involvement and while it may be difficult for one teacher to educate all parents, school-wide programs led by the principal and/or school psychologist may be beneficial. Results of a recent meta-analysis also demonstrate the benefits of parental involvement (Fan & Chen, 2000).

Early reading programs are beneficial because reading is an important skill for all subsequent knowledge acquisition. Early reading programs are found to contribute to higher student success (Slavin, Karweit, & Wasik, 1994; Slavin & Madden, 2001). Research demonstrates that assisting students in the process of decoding and providing opportunities to practice reading are valuable strategies (Talbott, Lloyd, & Tankersley, 1994). One program that has been implemented to promote early reading is "Success for All" (Ross, Smith, Slavin, & Madden, 1997). This program involves changing the classroom set-up for reading, such that small groups of students at the same reading level are placed together for 90 minutes of direct language arts instruction. An additional component of "Success for All" is reading tutors who work closely with first grade students to facilitate successful reading before the need for remediation (Slavin, Madden, Karweit, Livermon, & Dolan, 1989).

Effective behavior modification strategies may target the whole classroom to reduce behavior problems. Promoting self-evaluation and self-management of behaviors may provide the student a sense of greater control over his or her behavior and consequences and enhance appropriate classroom behavior. Another useful strategy can be consistently posting good group and individual behavior in the classroom (Shapiro, 1996). While behavior modification focuses mostly on the overt behaviors, cognitive behavioral modification also addresses the underlying cognitions influencing the behaviors. Cognitive behavioral modification involves combining behavior approaches such as modeling, feedback, and reinforcement with cognitive approaches such as "cognitive think alouds" to teach strategies such as anger control and self-coping. A meta-analysis found that cognitive behavioral modification provided lasting effects in reducing hyperactivity-impulsivity and aggression (Robinson, Smith, Miller, & Brownell, 1999).

Formative evaluation involves the systematic ongoing evaluation and modification of teaching programs. While much of the research on this has been conducted with special education students, formative evaluation can also be used with regular education students as well. Formative evaluation allows for both teacher and student feedback so that the program can be modified if unsuccessful, or continued if successful. The results of a meta-analysis suggested that formative evaluation procedures reliably increase academic achievement (Fuchs & Fuchs, 1986).

Examples of empirically studied comprehensive school-wide programs to promote socioemotional and cognitive competence include, Project ACHIEVE and Promoting Alternative Thinking Strategies (PATHS). Project ACHIEVE includes several components designed to address the psychosocial and academic needs of many children in elementary and middle schools (Knoff & Batsche, 1995). There are seven interdependent components of Project ACHIEVE: (a) strategic planning and organizational analysis and development; (b) referral question consultation process; (c) effective classroom teaching/staff develop-

ment; (d) instructional consultation and curriculum based assessment; (e) behavioral consultation and behavioral interventions including school-wide and parent/community use of social skills (or problem solving) and aggression control training; (f) parent training, tutoring, and support; and (g) research and accountability (Knoff, 1999).

PATHS targets the development of social and emotional competence in order to build protective factors and decrease risk for behavior problems and enhance achievement (it also aims to improve the quality of the classroom ecology) (Greenberg, Kusche, Cook, & Quamma, 1995). PATHS focuses on the developmental integration of affect, behavior, and cognitive understanding, recognizing that a child's behavior and self-regulation are functions of emotional awareness, affective-cognitive control, and social-cognitive understanding. PATHS aims to provide children with the knowledge and skills necessary for: (a) self-control; (b) understanding, expressing, and regulating their emotions; (c) increasing self-esteem; and (d) effective social problem-solving. Both PATHS and Project ACHIEVE are examples of programs that incorporate many of the above empirically supported intervention strategies and each has been successfully implemented school-wide.

It is necessary to design, implement, and evaluate remedial strategies that facilitate academic success. Educational professionals and researchers are encouraged to pilot alternative interventions, empirically examine the efficacy of such efforts, document merits and limitations of various strategies, and disseminate the results of current and past research to others. During the past decade, an assortment of literature has included reviews of current intervention strategies and specific suggestions to optimize student achievement trajectories (Forness, Kavale, Blum, & Lloyd, 1997; Knoff & Batsche, 1995; National Association of School Psychologists, 1998; Slavin, Karweit, & Madden, 1989). This research and related literature will provide direction as school psychologists move forward and advocate empirically supported intervention strategies (review of the above literature addressing alternative intervention strategies is encouraged, highlights are provided in Table 3). Also, the National Association of School Psychologists publishes a handout for parents (Canter & Carey, 1998) and a handout for teachers (Canter, Carey, & Dawson, 1998) regarding retention and promotion which identifies

Table 3

Research and Related Literature Provides Direction Regarding Empirically Supported Prevention and Intervention Strategies to Facilitate Academic Achievement and Socioemotional Adjustment.

Parent Involvement (Fan & Chen, 2000; Harrison, 1999)
Early Reading Programs (Talbott, Lloyd, & Tankersley, 1994)
Instructional Modifications (Slavin, Karweit, & Madden, 1989)
School Based Mental Health Programs (Dwyer & Bernstein, 1998; Tharinger & Stafford, 1995)
Direct Instruction Strategies (White, 1988)
Behavior Modification Strategies (Skiba & Casey, 1985)
Cognitive Behavior Modification Strategies (Robinson, Smith, Miller, & Brownell, 1999)
Summer School Programs (Cooper, Charlton, Valentine, & Muhlenbruck, 2000)
Extended Day Learning Opportunities (U.S. Department of Education, 1998)
Effective Preschool and Kindergarten Programs (Casto & Mastropieri, 1986)
Formative Evaluation (Fuchs & Fuchs, 1986)

Note. The citations above are examples of empirically supported alternatives to grade retention and social promotion and related research, additional research is available in each area and a thorough literature search would yield additional alternative strategies.

what parents and teachers may do to help children.

It has been suggested that "...the real need is not so much to find a formula for effective *remediation*, as it is to find a formula for effective *education*..." (Alexander, Entwisle, & Kabbani, 1999; p. 15). Given the cumulative nature of development (as characterized by the transactional model described above) and considering the results of research in the fields of education, child development, and psychology, specific academic and socioemotional early education programs warrant further emphasis. Research demonstrates a range of indicators of success for children who attend model early childhood programs (Behrman, 1995).

IN SUM

In looking backwards at the retention research and previous reviews and meta-analyses, a consistent theme emerges—grade retention is not an empirically supported intervention. As reflected in the results of the three meta-analyses described above, the confluence of results from research during the past century fails to demonstrate achievement, socioemotional, or behavioral advantages of retaining students. Moreover, the research consistently demonstrates that students who are retained are more likely to drop out of high school.

Other educational research presents evidence that alternative strategies, such as parental involvement, modification of instructional strategies, early reading instruction, cognitive-behavioral modification, systematic formative evaluation, and assorted early intervention efforts, provide positive effects on subsequent school achievement and adjustment. The synthesis of research, many citations, and tables presented above provide school psychologists with an overview of seminal research and an update in this area to share with other educational professionals. It is time to move beyond the rhetoric regarding the relative merits and limitations of grade retention and social promotion. Instead, a focus on implementing prevention and intervention strategies with demonstrated effectiveness is recommended. We are informed by nearly a century of research and we should embrace this knowledge as we educate children in the new millennium. School psychologists are in key positions to disseminate research examining the effects of grade retention and advocate that effective strategies are implemented.

REFERENCES

Alexander, K., Entwisle, D., & Dauber, S. (1994). *On the success of failure: A reassessment of the effects of retention in the primary grades.* New York: Cambridge University Press.

Alexander, K., Entwisle, D., & Dauber, S. (2000). *Dropout in relation to grade retention: An accounting from the beginning school study.* Paper presented at the National Invitational Conference hosted by the Laboratory for Student Success at Temple University for Research in Human Development and Education. Alexandria, Virginia. (October, 18-19).

Alexander, K., Entwisle, D., & Kabbani, N. (1999). *Grade retention, social promotion, and "third way" alternatives.* Paper presented at the National Invitational Conference hosted by the Laboratory for Student Success at Temple University for Research in Human Development and Education. Alexandria, Virginia (November 29 - December 1).

American Federation of Teachers. (1998). *Making standards matter 1998.* Washingon DC: Author.

Bachman, J., Green, S., & Wirtanen, I. (1971). *Dropping out: Problem or symptom?* Ann Arbor, MI: Institute for Social Research.

Behrman, R. (1995). Long-term outcomes of early childhood programs. *The Future of Children, 5,* 206-221.

Byrnes, D. (1989). Attitudes of students, parents, and educators toward repeating a grade. In L. A. Shepard & M. L. Smith (Eds.), *Flunking grades: Research and policies on retention* (pp. 16-33). London: The Falmer Press.

Cairns, R., & Cairns, B. (1994). *Lifelines and risks: Pathways of youth in our time.* Cambridge: Cambridge University Press.

Cairns, R., Cairns, B., & Neckerman, H. (1989). Early school dropout: Configurations and determinants. *Child Development, 60,* 1437-1452.

Canter, A., & Carey, K. (1998). *Retention and promotion: A handout for parents.* Bethesda, MD: National Association of School Psychologists.

Canter, A., Carey, K., & Dawson, P. (1998). *Retention and promotion: A handout for teachers.* Bethesda, MD: National Association of School Psychologists.

Casto, G., & Matropieri, M. A. (1986). The efficacy of early intervention programs: A meta-analysis. *Exceptional Children, 52,* 417-424.

Catterall, J. (1987). On the social costs of dropping out of school. *High School Journal, 71,* 19-30.

Center for the Study of Social Policy. (1994). *Kids count data: State profiles of child well-being.* Washington, DC: U.S. Government Printing Office.

Christenson, S. L. (1995). Supporting home-school collaboration. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology, III* (pp. 253-268). Washington, DC: National Association of School Psychologists.

Clinton, W. (1997). *State of the Union Address (1997).* Washington, DC : U. S. Government Printing Office.

Clinton, W. (1998). *State of the Union Address (1998).* Washington, DC : U. S. Government Printing Office.

Clinton, W. (1999). *State of the Union Address (1999).* Washington, DC: U.S. Government Printing Office.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.)*. Hillsdale, NJ: Erlbaum.

Cooper, H., Charlton, K., Valentine, J., & Muhlenbruck, L. (2000). Making the most of summer school: A meta-analytic and narrative review. *Monographs of the Society for Research in Child Development, 65* (1, Serial No. 260).

Cooper, H., & Hedges, L. V. (1994). *The handbook of research synthesis*. New York: Sage.

Dawson, P. (1998a). A primer on student grade retention: What the research says. *Communique', 26*, 28-30.

Dawson, P. (1998b). A review of "On the success of failure: A reassessment of the effects of retention in the primary grades." *Communique', 26*, 20-21.

Dryfoos, J. (1990). *Adolescents at risk: Prevalence and prevention*. New York: Oxford University Press.

Dwyer, K., & Bernstein, R. (1998). Mental health in the schools: Linking islands of hope in a sea of despair. *School Psychology Review, 27*, 277-286.

Ensminger, M., & Slusarick, A. (1992). Paths to high school graduation or dropout: A longitudinal study or a first grade cohort. *Sociology of Education, 65*, 95-113.

Evans, L., & DiBenedetto, A. (1990). Pathways to school dropout: A conceptual model for early prevention. *Special Services in School, 6*, 63-80.

Fan, X., & Chen, M. (2000). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review, 13*, 1-22.

Fine, M. (1989). Why urban adolescents drop out of public high school. *Teachers College Record, 87*, 393-409.

Fine, M. (1991). *Framing dropouts: Notes on the politics of an urban public high school*. Albany, NY: State University of New York Press.

Finlayson, H. J. (1977). Non-promotion and self-concept development. *Phi Delta Kappan, 59*, 205-206.

Forness, S. R., Kavale, K. A., Blum, I. M., & Lloyd, J. W. (1997). Mega-analysis of meta-analyses: What works in special education and related services. *Teaching Exceptional Children, 29*, 4-9.

Fuchs, L. A., & Fuchs, D. (1986). Effects of systematic formative evaluation: A meta-analysis. *Exceptional Children, 53*, 199-208.

Glass, G. (1978). Integrating findings: The meta-analysis of research. *Review of Research in Education, 5*, 351-379.

Glass, G., McGaw, B., & Smith, M. (1981). *Meta-analysis in social research*. Beverly Hills, CA: Sage.

Godfrey, E. (1972). The tragedy of failure: Results of a North Carolina survey. *Education Digest, 37*, 34-35.

Greenberg, M. T., Kusche, C. A., Cook, E. T., & Quamma, J. P. (1995). Promoting emotional competence in school-aged children: The effects of the PATHS curriculum. *Development & Psychopathology, 7*, 117-136.

Grissom, J., & Shepard, L. (1989). Repeating and dropping out of school. In L. A. Shepard & M. L. Smith (Eds.), *Flunking grades: Research and policies on retention* (pp. 16-33). London: Falmer Press.

Harrison, P. (1999). Special issue - Beginning school ready to learn: Parental involvement and effective educational programs. *School Psychology Review, 28*, 333-46.

Hauser, R., Pager, D., & Simmons, S. (2000). *Dropout in relation to grade retention: An accounting from the beginning school study*. Paper presented at the National Invitational Conference hosted by the Laboratory for Student Success at Temple University for Research in Human Development and Education. Alexandria, Virginia (October, 18-19).

Hedges, L., & Olkin, I. (1985). *Statistical methods for meta-analysis*. New York: Academic Press.

Holmes, C. T. (1984). Effect size estimation in meta-analysis. *Journal of Experimental Education, 52*, 106-109.

Holmes, C. T. (1989). Grade-level retention effects: A meta-analysis of research studies. In L. A. Shepard & M. L. Smith (Eds.), *Flunking grades: Research and policies on retention* (pp. 16-33). London: Falmer Press.

Holmes, C. T., & Matthews, K. M. (1984). The effects of nonpromotion on elementary and junior high school pupils: A meta-analysis. *Reviews of Educational Research, 54*, 225-236.

Hubbell, B. A. (1981). Grade retention policies at the elementary school level. *Dissertation Abstracts International, 41*, 2932A. (University Microfilms No. 81-02736)

Hunter, J., & Schmidt, F. (1990). *Methods of meta-analysis: Correcting error and bias in research findings*. Newbury Park, CA: Sage.

Jackson, G. (1975). The research evidence on the effects of grade retention. *Review of Educational Research, 45*, 613-635.

Jimerson, S. (1999). On the failure of failure: Examining the association of early grade retention and late adolescent education and employment outcomes. *Journal of School Psychology, 37*, 243-272.

Jimerson, S. (2001). Meta-analysis of grade retention research: New directions for practice in the 21st century. *School Psychology Review, 30*, 313-330.

Jimerson, S., Anderson, G., & Whipple, A. (2001). *Winning the battle and losing the war: Examining the relation grade retention and dropping out of high school*. Manuscript submitted for publication.

Jimerson, S., Carlson, E., Rotert, M., Egeland, B., & Sroufe, L. A. (1997). A prospective, longitudinal study of the correlates and consequences of early grade retention. *Journal of School Psychology, 35*, 3-25.

Kirsch, I., Jungeblut, A., Jenkins, L., & Kolstad, A. (1993). *Adult literacy in America: A first look at the results of the national adult literacy survey*. Report prepared by Educational Testing Service with the National Center for Education Statistics, U.S. Department of Education. Washington, DC: U.S. Government Printing Office.

Knoff, H. (1999). *Project ACHIEVE briefing document and basic information*. Tampa, FL: University of South Florida.

Knoff, H., & Batsche, G. (1995). Project ACHIEVE: Analyzing school reform process for at-risk and underachieving students. *School Psychology Review, 24*, 579-603.

Kratochwill, T., & Stoiber, K. (2000). Empirically supported interventions and school psychology: Announcing a new standing section. *School Psychology Quarterly, 15*, 69-74.

Kratochwill, T., Stoiber, K., & Gutkin, T. (2000). Empirically supported interventions and school psychology: The role of negative results in outcome research. *Psychology in the Schools, 37*, 399-414.

Kronick, R., & Hargis, C. (1990). *Dropouts: Who drops out and why and the recommended action*. Springfield, IL: Charles C. Thomas.

Light, R., & Pillemer, D. (1984). *Summing up: The science of reviewing research*. Cambridge, MA: Harvard University Press.

Lloyd, D. (1978). Prediction of school failure from third-grade data. *Educational and Psychological Measurement, 38*, 1193-1200.

McCoy, A. R., & Reynolds, A. J. (1999). Grade retention and school performance: An extended investigation. *Journal of School Psychology, 37*, 273-298.

McDill, E., Natriello, G., & Pallas, A. (1986). A population at risk: Potential consequences of tougher school standards for student dropouts. *American Journal of Education, 94*, 135-181.

Nason, B. (1991). Retaining children: Is it the right decision? *Childhood Education, 67*, 300-304.

National Association of School Psychologists (NASP). (1998). *Position statement: Student grade retention and social promotion*. Silver Spring, MD: Author.

Niklason, L. (1984). Nonpromotion: A pseudoscientific solution. *Psychology in the Schools, 21,* 485-499.

Niklason, L. B. (1987). Do certain groups of children profit from a grade retention? *Psychology in the Schools, 24,* 339-345.

Pallas, A. (1986). School dropouts in the United States. In J. Stern & M. Williams (Eds.), *The condition of education: Statistical report from the Center for Educational Statistics* (pp. 158-174). Washington, DC: U.S. Government Printing Office.

Plummer, D. L., & Graziano, W. G. (1987). Impact of grade retention on the social development of elementary school children. *Developmental Psychology, 23,* 267-275.

Robinson, T. R., Smith, S. W., Miller, M. D., & Brownell, M. T. (1999). Cognitive behavior modification of hyperactivity-impulsivity and aggression: A meta-analysis of school-based studies. *Journal of Educational Psychology, 91,* 195-203.

Roderick, M. (1994). Grade retention and school dropout: Investigating the association. *American Educational Research Journal, 31,* 729-759.

Roderick, M. (1995). Grade retention and school dropout: Policy debate and research questions. *The Research Bulletin, 15,* 88-92.

Rose, J., Medway, F., Cantrell, V., & Marus, S. (1983). A fresh look at the retention-promotion controversy. *Journal of School Psychology, 21,* 201-211.

Ross, S. M., Smith, L. J., Slavin, R. E., & Madden, N. A. (1997). Improving the academic success of disadvantaged children: An examination of success for all. *Psychology in the Schools, 34,* 171-180.

Rumberger, R. (1987). High school dropouts: A review of issues and development. *Review of Educational Research, 57,* 101-121.

Rumberger, R. (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal, 32,* 583-625.

Safer, D. J. (1986). Nonpromotion correlates and outcomes at different grade levels. *Journal of Learning Disabilities, 19 (8),* 500-503.

Sameroff, A. (1992). Systems, development, and early intervention. *Monographs of the Society for Research in Child Development, 57,* 154-163.

Sameroff, A., & Chandler, M. (1975). Reproductive risk and the continuum of care-taking casualty. In F. Horowitz, E. Hetherington, P. Scarr-Salapatek, & A. Siegal (Eds.), *Review of child development research, vol. 4.* (pp. 187-244). Chicago: University of Chicago Press.

Sameroff, A., & Fiese, B. (1990). Transactional regulation and early intervention. In S. J. Meisels & J. P. Shonkoff (Eds.), *Handbook of early childhood intervention* (pp. 119-149). New York: Cambridge University Press.

Sandoval, J., & Fitzgerald, P. (1985). A high school follow-up of children who were promoted or attended a junior first grade. *Psychology in the Schools, 22,* 164-170.

Shapiro, E. S. (1996). Step 3: Instructional modification, general strategies. In S. N. Elliot & J. C. Witt (Eds.), *Academic skills problems* (pp. 138-164). New York: Guilford Press.

Shepard, L. S., & Smith, M. L. (1989). *Flunking grades: Research and policies on retention.* London: Falmer Press.

Shepard, L. S., & Smith, M. L. (1990). Synthesis of research on grade retention. *Educational Leadership, 47,* 84-88.

Sheridan, S. M., & Kratochwill, T. R. (1992). Behavioral parent-teacher consultation: Conceptual and research considerations. *Journal of School Psychology, 30,* 117-139.

Skiba, R., & Casey, A. (1985). Interventions for behaviorally disordered students: A quantitative review and methodological critique. *Behavioral Disorders, 10,* 239-252.

Slavin, R. E., Karweit, N. L., & Madden, N. A. (1989). *Effective programs for students at risk.* Boston: Allyn & Bacon.

Slavin, R. E., Karweit, N. L., & Wasik, B. A. (1994). *Preventing early school failure: Research, policy, and practice.* Boston: Allyn & Bacon.

Slavin, R. E., & Madden, N. A. (2001). *One million children: Success for all.* Thousand Oaks, CA: Corwin Press.

Slavin, R. E., Madden, N. A., Karweit, N. L., Livermon, B. J., & Dolan, L. (1989). Can every child learn? An evaluation of "Success for All" in an urban elementary school. *Journal of Negro Education, 58,* 357-366.

Sroufe, L. A., Egeland, B., & Carlson, E. (1999). One social world: The integrated development of parent-child and peer relationships. In W. A. Collins & B. Larson (Eds.), *Relationships as developmental contexts: Minnesota Symposia on Child Psychology (Vol. 30, pp. 241-262).* Mahwah, NJ: Erlbaum.

Steinberg, L., Blinde, P., & Chan, K. (1984). Dropping out among language minority youth. *Review of Educational Research, 54,* 113-132.

Stoiber, K., & Kratochwill, T. (2000). Empirically supported interventions and school psychology: Rationale and methodological issues. *School Psychology Quarterly, 15,* 75-105.

Stroup, A., & Robins, L. (1972). Elementary school predictors of high school dropout among black males. *Sociology of Education, 45,* 212-222.

Swap, S. M. (1993). *Developing home-school partnerships: From concepts to practice.* New York: Teachers College Press.

Talbott, E., Lloyd, J. W., & Tankersley, M. (1994). Effects of reading comprehension interventions for students with learning disabilities. *Learning Disability Quarterly, 17,* 223-232.

Temple, J., Reynolds, A., & Ou, S. (2000). *Grade retention and school dropout: Another look at the evidence.* Paper presented at the National Invitational Conference hosted by the Laboratory for Student Success at Temple University for Research in Human Development and Education. Alexandria, Virginia. (October, 18-19).

Tharinger, D., & Stafford, M. (1995). Best practices in counseling elementary-age students. In A. Thomas and J. Grimes (Eds), *Best practices in school psychology, III* (pp. 893-907). Washington, DC: National Association of School Psychologists.

Tuck, K. (1989). *A study of students who left DC public school dropouts.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

U.S. Department of Commerce, Bureau of the Census. (1966). *Current population reports. School enrollment: Social and economic characteristics of students.* Washington, DC: U.S. Government Printing Office.

U.S. Department of Commerce, Bureau of the Census. (1990). *Current population reports. School enrollment: Social and economic characteristics of students.* Washington, DC: U.S. Government Printing Office.

U.S. Department of Education. (1999). *Taking responsibility for ending social promotion: A guide for educators and state and local leaders.* Washington, DC: U.S. Government Printing Office.

Webster, L. (2000). Re-Tension. *CASP Today, 49,* 17.

Wehlage, G., Smith, G., & Lipman, P. (1992). Restructuring urban schools: The new future experience. *American Educational Research Journal, 29,* 52-93.

White, W. A. T. (1988). A meta-analysis of effects of direct instruction in special education. *Education and Treatment of Children, 11,* 364-374.

White, K., & Howard, J. (1973). Failure to be promoted and self-concept among elementary school children. *Elementary School Guidance and Counseling, 7,* 182-187.

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Primary Prevention of School-Based Violence: A Developmental Risk and Resilience Model for School Psychologists

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A paramount goal for educators of today's youth is to provide a safe learning environment to foster positive academic and educational outcomes. Psychologists and educators call for adopting a prevention model for reducing the incidence and prevalence of school violence in current research efforts. This literature review serves to unify current understandings by adopting a risk and resiliency model of analysis. The goals of this article are to: (a) examine conceptualizations of school violence and theoretical frameworks invoked in current prevention programs, and (b) extract key findings from these programs and make recommendations for school psychologists. The argument will be made that most programs in the domain of school violence prevention overlook key principles of developmental psychology and ecological systems theory. School psychologists are in a unique position to apply current empirical understandings to existing violence-prevention programs through consultation models of service-delivery.

Recent legislation, such as the Goals 2000: Educate America Act, has made creating a safe learning environment for America's children a national priority. Goal 7 of the Act states that "by the year 2000, every school in the United States will be free of drugs and violence and will offer a disciplined environment conducive to learning" (National Educational Goals Panel, 1994). While it is clear that this venerable goal has not been actualized, the spirit of the Act is still omnipresent in public policy and recent research efforts (Durlack, 1995). Rationale for including such a goal includes the current state of violence in the schools, the opportunity afforded by the paradigm shift to primary prevention efforts to promote mental health (Bloom, 1979; Bower, 1965; Caplan & Caplan, 1993) and the reduction of the incidence and prevalence of violence (Durlack, 1995).

CONCEPTUALIZATIONS OF VIOLENCE IN THE SCHOOLS

It has been argued that American youths are suffering an "epidemic of violence, both in and out of the classroom" (Nemecek, 1998, p.15). Heightened public concern sparked by recent school shootings coupled with the majority of public schools participating in school-based violence prevention programs suggests that violence prevention efforts are a salient topic for researchers and school psychologists alike.

There is debate among researchers as to the current scope of violence in the schools (Ascher, 1994; Brock, 1999; Flannery, 1998; Furlong, Bates, & Smith, 2001; Hyman & Perone, 1998b). This may be in part due to the methodological challenges associated with capturing prevalence

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and incidence rates of a multifaceted set of behaviors subsumed under the term "school violence." For example, the United States Office of Education's Annual Safe Schools Report (2001) provides current statistics of school violence ranging from fear of attending school, avoidance of school, bullying, physical fights, weapon possession, to stabbings and shootings.

While the exact nature and preponderance of incidents of "school violence," are still largely debated in the field, concerns about student safety on the part of students, parents and school staff are still widespread. For example, an estimated 74% of public schools have formal school violence prevention or reduction programs or efforts (National Center for Education Statistics, 1997). In addition, the United States Department of Education (USDE) has recently assembled a Safe and Drug-Free School Expert Panel whose task is to identify programs that should be promoted nationally. A publication that features 42 programs aimed at promoting "healthy students and safe, disciplined, and drug-free schools" identified as either "promising" or "exemplary" will be published this year (USDE, 2001).

With the proliferation of public interest in providing safe learning environments for students, school psychologists may be called upon to evaluate the level of violence at their particular school sites or aid in selecting violence-prevention programs in an attempt to predict and prevent the likelihood of school shootings and other associated violent behavior. School psychologists may be held responsible in predicting "dangerous students" (Furlong et al., 2001), weapon possession in school, (Kingery & Coggeshall, 2001), and other violence on school campuses (Morrison & Skiba, 2001).

However, the science of prediction particularly for rare events such as school-based homicides, which constitute a relatively small proportion of violent incidents at school (Brock, 1999; Flannery, 1998; Furlong et al., 2001; Morrison & Skiba, 2001). Researchers argue that the prevention of such outbreaks of serious violent crime to focus first on concerns about bullying, student victimization, and misbehavior (Ascher, 1994; Brock, 1999; Hyman & Perone, 1998b). The California Commission on Teacher Credentialing (CTC, 1995) broadly defines violence as: "physical and nonphysical harm which causes damage, pain, injury or fear." The CTC also recognizes both contextual and personal factors in violence, reporting that "violence interrupts the school environment and results in the debilitation of personal development which may lead to hopelessness and helplessness" (p. 5).

While levels of responses are discussed in the research, the recognition that violence is a complex, multifaceted societal problem is much more agreed upon. School violence is best conceptualized as a systemic problem wherein any solution must also be systemic (American Psychological Association, 1997; Ascher, 1994; Haynes, 1998; Nemecek, 1998; Wilson, 1995). Thus, the school is an important context for influencing children's social development (Bronfenbrenner, 1979, 1986) and mental health needs (Doll & Lyon, 1998). The reviewed literature suggests that the promotion of social development is within the role and scope of educators (Furlong et al., 2001), particularly in social skills training and in promoting a positive culture in a school in an effort to curb and prevent school-based violence.

RATIONALE FOR ADOPTING A RISK AND DEVELOPMENTAL RESILIENCE FRAMEWORK

In the general psychology literature, it has been proposed in the latter part of the 20th century that there is a needed paradigm shift from considerations of *predisposing* factors in mental illnesses toward the concern with *precipitating* factors (Bloom, 1979). This paradigm involves a shift from focusing on the past toward a concern with the future of psychological development. This serves as the rationale for primary prevention efforts, which adopt a "risk and resiliency" framework of identifying the processes that serve to protect people against the psychological risks associated with adversity (Doll & Lyon, 1998; Rutter, 1987).

The paradigm shift also manifests itself in the approach educators and psychologists take in pri-

mary prevention efforts to reduce school violence and promote healthy development (Derzon, 2001). Primary prevention, by definition, is population-specific (i.e., school-wide), rather than targeted toward a group of persons with identified risk factors for violence (i.e., students diagnosed with conduct disorder). Researchers have suggested that primary prevention efforts increase the number of children who receive the benefits of services (Caplan & Caplan, 1993; Durlack, 1995), which may include ensuring of adequate "psychosocial and sociocultural supplies" that promote healthy development (Caplan, 1965, p. 10).

For the purpose of this article, violent behavior in the schools is conceptualized as a barrier to healthy development. This definition encompasses a risk and resiliency framework, which includes key developmental and ecological perspectives. In essence, understanding resilience depends largely on the adaptive development of competence in the multiple contexts in which children develop (Doll & Lyon, 1998; Masten, 2001). This framework is embedded in the goal of primary prevention to reduce the incidence and prevalence of violent cognitions, behavior, and the development of aggressive coping strategies by promoting prosocial behavior. Such behavior includes increasing the "psychosocial supplies" available to school-aged populations, specifically engendering positive coping skills and non-violent interpersonal strategies for conflicts in multiple contexts. Current efforts, however, vary in the degree to which they adopt this philosophy. The next section will elucidate the philosophies, assumptions, theoretical explanations and rationales invoked in recent literature on school-based violence prevention efforts.

THEORETICAL FRAMEWORKS INVOKED IN CURRENT PREVENTION PROGRAMS

Risk factors for violent behavior in the schools are embedded in the general literature on risk factors for aggression. While it is clear that violent behavior has multiple etiologies (Bell, 2000), the degree to which the focus is on such causes varies. Ideally, identifying risk factors will lead to opportunities for prevention and the identification of protective processes that promote healthy development and will serve to change children's life trajectory from risk to prosocial adaptation (Rutter, 1987). Unfortunately, much of the reviewed literature on patterns of violence is narrower in scope, centering on variables, or risk factors, that are associated with violence (Johnson, 2000; Tupin, 2000).

This focus can be conceived as a "laundry list" approach of identifying risk factors associated with violent behaviors. This approach has several limitations, including largely excluding protective mechanisms, and life course development that situates violence in a broader, dynamic framework of human development. For example, elementary schools have typically assumed the role of developing socially competent citizens vis-à-vis a variety of social skills intervention programs designed to reduce antisocial behavior and promote prosocial behavior. These interventions have been considered to be "implicit violence prevention," where the line between primary prevention of school violence and social skills training is "blurred at best" (Larson, 1994, p. 151).

These "skill-based" approaches have led to a conceptualization of preventing violence by providing information and opportunities to practice and reward appropriate prosocial behaviors. Some approaches have focused on the use of peer-managers (Christopher, Hansen, & MacMillan, 1991; Sugai & Chanter, 1989), while others have focused on teacher positive reinforcement and modeling (LeBlanc & Matson, 1995; Middleton & Cartledge, 1995; Nimness, Ellis, Miller, Baker, & Rutherford, 1995). These studies all advocate for the benefits of social skills training in the classroom and in the school for reduction of such antisocial behavior as teasing, bullying, and aggressive behavior. Overall, in these reviewed studies and in a meta-analysis of primary prevention programs to prevent behavioral and social problems, outcome data are generally positive. A strong caveat, however, is that generalizability and stability of behavioral changes are seldom evaluated in these skill-based programs. Therefore, it is difficult to address the issue of treatment maintenance

and durability of program impact, which are critical to any attempt to promote healthy, non-violent behavior. Additionally, several researchers have suggested that behavioral changes alone are not evidence of treatment effects in preventing future violence (Larson, 1994).

Perhaps even more important is the relative absence of principles of developmental psychology and age-appropriateness in these types of interventions. The inclusion of cognitive, physical, and social development in efforts to prevent school violence cannot be underestimated, particularly because prevention programs are implemented at multiple levels of schooling. Most interventions have been targeted at elementary school populations. Aber, Jones, Brown, Chaudry and Samples (1998) note that because of the apparent difficulties in successfully treating already established conduct disorder, violence, and antisocial behavior during adolescence, a growing number of violence prevention efforts focus on the elementary school years. However, the importance of continued efforts and preventive strategies in middle schools, and high schools are needed to address the full continuum of student needs (Larson, 1994).

Therefore, examining the impact of school-based preventative intervention must take into account the current research of developmental psychopathology and principles of healthy development to adequately address the needs of school populations. A general model across all stages of development is no longer appropriate. Based on the following literature, school psychologists would be well served to embrace approaches that include developmental principles in violence prevention efforts.

Inclusion of Developmental Psychology Principles in Violence Prevention

A number of researchers have acknowledged other developmental principles that need to be addressed in any primary prevention efforts by reconceptualizing risk factors as unmet developmental needs (Murray, Guerra, & Williams, 1997), enhancing positive developmental skills (Shulman, 1996), focusing on age-appropriate interventions (Murray et al., 1997; Stipek, de la Sota, & Weishaupt, 1999), and on the social-cognitive and social-emotional development of youth (Aber et al., 1998; Nadel, Spellmann, Alvarez-Canino, Lausell-Bryant, & Landsberg, 1996; Shulman, 1996).

In an overview of preventive interventions to violence, Murray et al. (1997) advocate for blending current developmental theory and practice to emphasize children's dynamic development. Since risk factors vary by age, the authors argue that adopting a life-course development model facilitates an understanding of developmental barriers, which leads to a focus on prevention as providing developmental supports. They propose centering on transitions and pathways in the life course, where transitions are "entry into new developmental stages" and pathways are "the sequencing of transitions and experiences within stages during the life course" (p. 121). Indeed, other researchers have attempted to equip students with strategies for resisting high-risk behavior at particular developmental stages in general mental health promotion (Caplan, 1965) and in violence prevention in particular (Stipek et al., 1999).

One final set of developmental principles purported to promote the psychological maturity of individuals to resist violence as a coping strategy is enhancing "developmental skills" (Shulman, 1996). Such developmental skills include moral reasoning and the promotion of cognitive developmental growth. Based on Kohlberg's (1969) conception of developing moral thinking via role- and perspective-taking, Shulman outlines a number of interventions that may support this process, which center on peer education as a compliment to adult teaching (e.g., students as conflict resolution trainers, mediators, and mentors). These interactions are said to promote ongoing self-reflection, greater self-awareness, and perspective taking, which is crucial to preventing violence.

While incorporating developmental principles into school-based violence prevention programs

improves the integrity of the treatment effect of programs, there is some doubt as to the success of such programs in increasingly violent contexts (Aber et al., 1998; Murray et al., 1997). Therefore, many researchers recognize the importance of the child-in-context, a theoretical perspective first delineated by Bronfenbrenner (1979). His perspective, in short, is that development is a product of the interaction between a person and his or her environment. The following section will highlight efforts to include an ecological perspective in school-based violence prevention efforts.

Inclusion of Ecological Principles in Violence Prevention

The most salient ecological contexts for the developing child (as represented in the literature) are the school, the home, and the neighborhood. While each of these contexts is significant for the developing child, often programs to reduce the incidence of school violence are not consistently implemented within or across settings. However, there is a growing body of research that addresses parents as key players in school-based violence prevention efforts (Arizona Department of Education, 1994; Sanders, 1998; United States Senate, 1995; Wilson, 1995). In addition, there is mounting evidence that the school psychologist can play an important role in facilitating consensus among key players in violence prevention efforts (Baker, 1998; Furlong, Morrison, & Pavelski, 2000; Hyman & Perone, 1998a; Stephens, 1994).

RECOMMENDATIONS

Using the existing literature as a theoretical guide for practice in the field, school psychologists are in a unique position to consult with administrators and teachers to include developmental and ecological perspectives in violence-prevention efforts. Since the majority of schools already have some form of a school-based violence prevention program in place (NCES, 1997), it makes sense begin with critical evaluations of these existing programs.

However, it may be the case that the school psychologist will be called, or choose to lead in the selection of a new universal primary prevention program as a part of a comprehensive school safety plan. Whether the school psychologist is selecting a new violence-prevention program to be implemented at the school site or is consulting with administrators, teachers, and parents about existing efforts, the following guidelines are provided. Using key elements that are highlighted in this review, these guidelines are framed around three key components in a primary prevention program: assessment, prevention implementation, and evaluation.

Assessment

With sensitivity to avoiding "laundry lists" of risk factors, assessment of the risk and protective factors that focus on the process of child development should be conducted. An integration of theory and practice, with most major risk factors for violence conceptualized as unmet developmental needs (Murray et al., 1997) would go a long way to shifting efforts to a primary prevention model. Perhaps the most important developmental risk factors for aggression are (a) transitions and (b) prior histories of aggression (pathways). It is well-documented that while the nature of the aggression changes, the developmental trajectory of students that exhibit "career violence" is likely to become entrenched without intervention (Murray et al., 1997). Therefore, it is recommended that prevention strategies stress the importance of transitional stages and patterns of development.

Additionally, given the importance of context (Bronfenbrenner, 1979) and the potential mediation of context on the outcomes of school-based interventions to prevent violence (e.g., Aber et al., 1998), it follows that program developers and implementers need to consider assessing the multiple contexts in which the child develops. It would go a long way towards understanding children at risk of aggressive, violent behavior by conducting an initial classroom, school, and community assessment. The assessments may include classroom or school climate by assessing the frequency,

intensity, and location of aggressive acts, and assessing students' cognitions (e.g., aggressive fantasies, risk-taking behavior). The community assessment may include statistics on neighborhood violence and the nature or degree of parental involvement in schools.

Prevention Implementation

This review emphasizes the complexity and multiplicity of perspectives in the prevention of school violence. A number of theoretical perspectives guide interventions and prevention programs, including social learning theory, operant conditioning, developmental psychology (social-emotional and intellectual-cognitive), and the ecology of human development. It is likely that offering a continuum of services embracing the most empirically sound program effects should be implemented. For example, while skills-based programs show moderate effects (Durlack, 1995), the treatment integrity is enhanced when the component of changing children's social cognitions are included (Aber et al., 1998).

Additionally, programs should be aware that child development does not occur in a vacuum. Rather, a child is embedded in multiple contexts of development and is influenced by a number of socializing agents (e.g., teachers, administrators, peers, parents, school psychologists, clergy). Therefore, any primary prevention program to promote healthy development by thwarting aggressive coping mechanisms must understand the child-in-context. This can be achieved in a variety of ways.

Interventions should adapt violence prevention curriculum to a developmentally appropriate level. Examples for younger elementary-aged children include using concrete items for conveying themes in conflict management (Stipek et al., 1999), facilitating perspective-taking (Shulman, 1996), and anticipatory guidance for developmental transitions and life crises (Caplan, 1965; Murray et al., 1997).

Finally, violence prevention efforts should include a parent involvement component. Examples of ways to integrate parents into the milieu of a "positive school climate" is for parents to serve as hall monitors in high-frequency violence areas of the school (Astor, Pitner, & Duncan, 1996), be included in homework assignments for violence curriculum (Haynes, 1998), parent education efforts (Wilson, 1995), and involving parents in planning and implementation of prevention and intervention efforts (Comer, 1993).

Evaluation

Given limited resources and time, evaluation is often overlooked as a key component in program implementation, especially in primary prevention efforts to curb school violence. Most evaluations of violence prevention lack the methodological rigor needed to determine their effectiveness (United States Senate, 1995). To improve the usefulness of future evaluations, greater emphasis should be placed on designing stronger impact studies, including longitudinal assessment and generalizability to other non-classroom or non-school settings.

The school psychologist can be seen as a resource in all three of these components. Several researchers (Astor et al., 1996; Furlong et al., 2000; Morrison, Furlong, & Morrison, 1994; Stephens, 1994) have proposed ways that the school psychologist can be involved as a key player in primary prevention of school violence. School psychologists are in a unique position to take leadership roles in violence prevention based on their professional training and expertise. School psychologists are also well equipped to consult with teachers and administrators about the developmental and contextual factors in development (Astor et al., 1996); assist in assessing the school and classroom climate of violence and risk-taking behaviors (Furlong et al., 2000); and engage in school safety planning as a prevention strategy (Stephens, 1994). Developing a continuum of services from a developmental, ecological, primary prevention perspective will hopefully provide the incentive and momentum for schools to come closer to the goal of providing a safe learning environment for all of America's children.

REFERENCES

Aber, J. L., Jones, S. M., Brown, J. L., Chaudry, N., & Samples, F. (1998). Resolving conflict creatively: Evaluating the developmental effects of a school-based violence prevention program in neighborhood and classroom context. *Development and Psychopathology, 10,* 187-213.

American Psychological Association. (1997). *Reducing violence: A research agenda.* Washington, D. C.: Author.

Arizona State Department of Education. (1994). *School violence: Report of the superintendent's task force.* (ERIC Document Reproduction Service No. ED 381 704).

Ascher, C. (1994). Gaining control of violence in the schools: A view from the field. *ERIC Clearinghouse of Urban Education,* No. EDO-UD-94-6. [Online]. Available: http: eric-web.tc.Columbia.edu digests/dig100.html

Astor, R. A., Pitner, R. O., & Duncan, B. B. (1996). Ecological approaches to mental health consultation with teachers on issues related to youth and school violence. *Journal of Negro Education, 65,* 336-355.

Baker, J. A. (1998). Are we missing the forest for the trees? Considering the social context of school violence. *Journal of School Psychology, 36,* 29-44.

Bell, C. C. (2000). *Psychiatric aspects of violence: Issues in prevention and treatment.* San Francisco: Jossey-Bass.

Bloom, B. L. (1979). Prevention of mental disorders: Recent advances in theory and practice. *Community Mental Health Journal, 15,* 179-191.

Bower, E. M. (1965). Primary prevention of mental and emotional disorders. In N. M. Lambert, *The protection and promotion of mental health in school. Mental Health Monograph 5* (pp. 1-22). Washington, DC: U.S. Department of Health, Education, and Welfare.

Brock, S. E. (1999). The crisis of youth violence: Dangers and opportunities. *California Association of School Psychologists Today, 48,* 18-20.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology, 22,* 723-742.

Caplan, G. (1965). Opportunities for school psychologists in the prevention of mental disorders in children. In N. M. Lambert, *The Protection and Promotion of Mental Health in School. Mental Health Monograph 5* (pp.9-22). Washington, DC: U.S. Department of Health, Education, and Welfare.

Caplan, G., & Caplan, R. B. (1993). When school psychologists use mental health consultation and collaboration. *Mental health consultation and collaboration* (pp. 325-344). Prospect Heights, IL: Waveland Press.

Christopher, J. S., Hansen, D. J., & MacMillan, V. M. (1991). Effectiveness of a peer helper intervention to increase children's social interactions. *Behavior Modification, 15,* 22-50.

Commission on Teacher Credentialing State of California. (1995). *Creating caring relations to foster academic excellence: Recommendations for reducing violence in California schools. Final report. Advisory Panel of School Violence.* Sacramento, CA: Author.

Comer, J. P. (1993). *School power: Implications of an intervention project.* New York: The Free Press.

Derzon, J. M. (2001). Antisocial behavior and the prediction of violence: A meta-analysis. *Psychology in the Schools, 38,* 93-106.

Doll, B., & Lyon, M. (1998). Risk and resilience: Implications for the delivery of educational and mental health services in schools. *School Psychology Review, 27,* 348-363.

Durlack, J. (1995). *School based prevention programs for children and adolescents.* San Francisco: Jossey-Bass.

Flannery, D. J. (1998). Improving school violence prevention programs through meaningful evaluation. *ERIC Clearinghouse of Urban Education,* No. EDO-UD-98-2. [Online]. Available: http://eric-web.tc.columbia.edu/digests/dig132.html

Furlong, M., Morrison, G., & Pavelski, R. (2000). Trends in school psychology for the 21st century: Influences of school violence on professional change. *Psychology in the Schools, 37,* 81-90.

Furlong, M., Bates, M., & Smith, D. (2001). Predicting school weapon possession: A secondary analysis of the youth risk behavior surveillance survey. *Psychology in the Schools, 38,* 127-138.

Furlong, M., Kingery, P., & Bates, M. (2001). Introduction to the special issue on the appraisal and prediction of school violence. *Psychology in the Schools, 38,* 89-91.

Haynes, N. M. (1998). Creating safe and caring school communities: Comer school development program schools. *Journal of Negro Education, 6,* 308-314.

Hyman, I. A., & Perone, D. C. (1998a). Introduction to the special theme section on school violence: The ecology of school violence. *Journal of School Psychology, 36,* 3-5.

Hyman, I. A., & Perone, D. C. (1998b). The other side of school violence: Educator policies and practices that may contribute to student misbehavior. *Journal of School Psychology, 36,* 7-27.

Johnson, B. R. (2000). Assessing the risk for violence. In C. Bell (Ed.), *Psychiatric aspects of violence: Issues in prevention and treatment,* (pp. 31-37). San Francisco: Jossey-Bass.

Kingery, P., & Coggeshall, M. (2001). Surveillance of school violence, injury, and disciplinary actions. *Psychology in the Schools, 38,* 117-126.

Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In A. A. Goslin (Ed.), *Handbook of socialization theory and research,* (pp. 347-480). Chicago, IL: Rand McNally.

Larson, J. (1994). Violence prevention in the schools: A review of selected programs and procedures. *School Psychology Review, 23,* 151-164.

LeBlanc, L. A., & Matson, J. L. (1995). A social skills training program for preschoolers with developmental delays: Generalization and social validity. *Behavior Modification, 19,* 192-210.

Masten, A. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56,* 227-238.

Middleton, M. B., & Cartledge, G. (1995). The effects of social skills instruction and parental involvement on the aggressive behaviors of African American males. *Behavior Modification, 19,* 192-210.

Morrison, G., Furlong, M., & Morrison, R. (1994). School violence to school safety: Reframing the issue for school psychologists. *School Psychology Review, 23, 236-256.*

Morrison, G., & Skiba, R. (2001). Predicting violence from school misbehavior: Promises and perils. *Psychology in the Schools, 38,* 173-184.

Murray, M. E., Guerra, N. G., & Williams, K. R. (1997). Violence prevention for the 21st century. In R. Weissberg, T. Gullotta, R. Hampton, B. Ryan, & G. Adams (Eds.), *Enhancing children's wellness: Issues in children's and families' lives,* (pp. 105-128). Thousand Oaks, CA: Sage.

Nadel H., Spellmann, M., Alvarez-Canino, T., Lausell-Bryant, L., & Landsberg, G. (1996). The cycle of violence and victimization: A study of the school-based intervention of a multidisciplinary youth violence-prevention program. *American Journal of Preventative Medicine, 12,* 109-119.

National Center for Educational Statistics. (1997). *Statistics in brief: Student victimization at school.* Washington, DC: U.S. Department of Education.

National Educational Goals Panel. (1994). *Strong families, strong schools.* Washington DC: United States Department of Education, US Government Printing Office.

Nemecek, S. (1998). Forestalling violence: American youths are suffering an epidemic of violence, both in and out of the classroom. *Scientific American, 279,* 15-16.

Ninness, H. A., Ellis, J., Miller, W. B., Baker, D., & Rutherford, R. (1995). The effect of a self-management training package on the transfer of aggression control procedures in the absence of supervision. *Behavior Modification, 19,* 464-498.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry, 57,* 316-331.

Sanders, M. G. (1998). School-family-community partnerships focused on school safety: The Baltimore example. *Journal of Negro Education, 65,* 369-374.

Shulman, H. A. (1996). Using developmental principles in violence prevention. *Elementary School Guidance & Counseling, 30,* 170-180.

Sleek, S. (1998). Experts scrambling on school shootings. *APA Monitor, 29* (8), 35.

Stipek, D., de la Sota, A., & Weishaupt, L. (1999). Life lessons: An embedded classroom approach to preventing high-risk behaviors among preadolescents. *The Elementary School Journal, 99,* 433-451.

Stephens, R. D. (1994). Planning for safer and better schools: School violence prevention and intervention strategies. *School Psychology Review, 23,* 204-215.

Sugai, G., & Chanter, C. (1989). The effects of training students with learning and behavior disorders to modify the behavior of their peers. *Education and Treatment of Children, 12,* 134-151.

Tupin, J. (2000). The biology of violence. In C. Bell (Ed.), *Psychiatric aspects of violence: Issues in prevention and treatment,* (pp. 3-9). San Francisco: Jossey-Bass.

United States Office of Education. (2001). *Annual Safe Schools Report.* [Online]. Available: www.hamfish.org/data/national/csi.html

United States Senate. (1995). *School safety: Promising initiatives for addressing school violence. Report to the ranking minority member, Subcommittee on Children and Families, Committee on Labor and Human Resources.* (Report No. GAO-HEHS-95-106). Washington, DC: Heath, Education, and Human Services Division of General Accounting Office. (ERIC Document Reproduction Service No. ED 384 125).

Wilson, A. (1995). *Violence and traumatic stress in urban schools.* (Report No. UD 030 150). Washington, DC: Regional Laboratory for Educational Improvement of the Northeast & Islands. (ERIC Document Reproduction Service No. ED 389 830).

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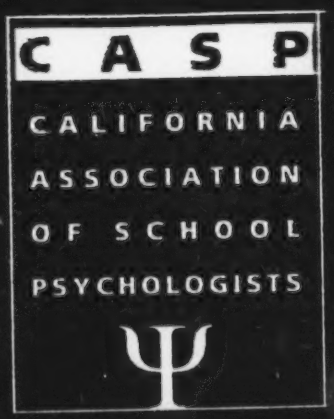

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